50 cents

California GARDEN

SINCE 1909 AUGUST-SEPTEMBER, 1967 VOL. 58 NO. 4

FLORAL EVENTS

AUGUST - SEPTEMBER, 1967

SAN DIEGO FLORAL ASSOCIATION PROGRAMS

Third Tuesday, 8 p.m. Floral Building, Balboa Park

Chairman — Mrs. Eugene Cooper

Regular Meeting, September 19, 8 p.m.

Surprise! An interesting program is planned but not yet finalized. Watch for the Bulletin for further news.

SAN DIEGO FLORAL ASSOCIATION CLASSES
FLORAL BUILDING, BALBOA PARK

For information, call Mrs. Roland Hoyt, Chairman, 296-2757
Classes will be discontinued during the Summer Months.

For information on Fall Classes, call Mrs. Roland Hoyt, Chairman 296-2757.

FLOWER SHOWS

AUGUST

5- 6 DAHLIA SHOW, 27th ANNUAL
Conference Bldg., Balboa Park
San Diego County Dahlia Society

5- 6 BEGONIA SHOW *Theme: "Wonderful World of Begonias"*
Westchester Women's Club, 8020 Alverston, L.A.
Westchester Branch American Begonia Society

19-20 DAHLIA SHOW, 36th ANNUAL
Darby Memorial Park, 3400 Arbor Vitae Blvd., Inglewood
Inglewood Dahlia Society

SEPTEMBER

2- 4 AMERICAN BEGONIA SOCIETY CONVENTION & FLOWER SHOW, 35th ANNUAL
Hawthorne Memorial Bldg., El Segundo & Prairie Ave., Hawthorne

BUS TOURS

July 30, 1967 8 a.m. - 7:30 p.m. Bus Tour to Huntington Gardens. San Diego Rose Society Leave Parking Lot behind Organ Balboa Park. Visit Armstrong Nurseries, Ontario. Lunch at Ontra. Huntington Botanical Gardens & Art Gallery, until closing. Cost: $5.50. Call Bertha Benson, 274-1626.

FLORAL COMMITTEE 200th ANNIVERSARY RESIGNATION ANNOUNCED

It is with deep personal regrets that due to circumstances beyond their control, Mrs. William Betts, Jr. (Joan) and Mrs. Allan Zukor (Alice), Co-chairmen of the Floral Committee of the 200th Anniversary Inc. have resigned. They will continue to work with the Floral program for 1969 as interested citizens.

They wish to thank everyone on their Committee for loyalty and assistance during the full year they were in charge.

The 200th Anniversary Office will inform the members of the future Chairman and the next Floral Committee meeting date.

By Joan Betts and Alice Zukor

The San Diego Floral Association

San Diego's Oldest and Largest Garden Club

Founded 1907 — Incorporated 1910

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PUBLISHERS SINCE 1909
of
CALIFORNIA GARDEN MAGAZINE

CALIFORNIA GARDEN
KNOW GROW SHOW

AUGUST - SEPTEMBER, 1967

Vol. 58 No. 4

THE COVER

The Cover: JODY GREGORY, large pink-beige decorative dahlia, up to 14 inches in size, has won many awards. It is named for Mrs. Alfred A. Gregory of Rancho Santa Fe.

—Betty Mackintosh

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CALIFORNIA GARDEN

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Among our Contributors

Susan D'Vincent is a senior in zoology with a minor in geology at San Diego College. She was a member of Dr. Gordon Gastil's class which found the specimen, and has worked in the geology department at San Diego State and has been following the progress of the identification of this petrified wood for over a year. Currently she is working at the Museum of Natural History in Balboa Park.

Samuel E. Foster, President of the Camellia Society, began with his first camellia, a **Debutante,** in 1952 and now has over 200 plants.

Maxine McCloskey served as Executive Assistant to Dr. James P. Gilligan, Chairman of the Sierra Club's Tenth Biennial Wilderness Conference. They are editing the papers presented for a book on the Conference to be published by the Sierra Club.

Kinya Washio came to San Diego in July 1964 with Dr. Tadashi Kubo, designer of the Japanese Garden for Murata Pearl Co., at Sea World. He is a graduate of the College of Agriculture, University of Osaka Prefecture, Sakai-Shi, Osaka-Fu, Japan. He has been a Teaching Assistant in the Department of Horticulture, University of Osaka Prefecture, and a Flower Breeding Technician. He has supervised rose garden and experimental farms and is co-author of a book and articles on garden planning as well as designer of several gardens.

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A Book In The Hand

Recent Books Reviewed by Garden Club Members

Flower Arrangements in Stately Homes. Julia Clements. Arco Publishing Co., 1967. 123 pages $9.00.

It isn't often that a book on Flower Arranging is published with lasting qualities such as this. Here is one you will keep and treasure, for it is timeless.

Julia Clements has written other books on Flower Arrangement; however this book is the most enriching. The text alone is worth the price. It covers architectural descriptions of historical interest, furnishings and family backgrounds with tidbits here and there about the gardens, allocating much credit to the gardeners (whose pride and devotion produce such an abundance of horticultural perfection for use and choosing.) "Capability" Brown is frequently referred to for it was he who designed, in the pastoral manner, so many gardens in England and on the Continent.

If you have been fortunate enough to have visited one or more of these majestic houses you will see them again as you read "Flower Arrangement in Stately Homes." If not, then this book will whet your appetite for a trip to Britain as a must in the future. (If you cannot go, then savor it all to the fullest in this book.) The superb color photos on most every page are done on a mat paper to give that mellow touch of age and beauty. Particular attention has been given to color harmony with close-ups to include small details of the vast treasures in these houses. In the midst of all this grandeur there is a real homey touch on page 70 which I will leave for you to discover for yourself.

The museum quality table settings are done with exquisite and elaborate appointments on damask cloths, small lace doilies or bare tables. Julia Clements uses much restraint here where a choice of flowers in these magnificent centerpieces is no task for the novice. Each table setting has its own kind of breath-taking beauty.

Julia Clements has an appreciation of flowers and handles them lovingly. She understands the demands of one kind of beauty competing with another and gives each its just due. She has used a wealth of choice material such as lilies, delphiniums, peonies, lilacs, in great profusion on a grand scale. There is no attempt to portray a period as such but rather to blend and she does it with seeming ease—the mark of a real artist.

This book is for study and pleasure. It is a real treat, examine closely and peruse slowly. For gift giving this would be a splendid choice not only for the arranger or gardener but for those who admire and appreciate this regal splendor as it is being preserved and portrayed here in all its glory.

Each time you go through it you will find something you have missed and, as you may have guessed, I have done so many times.

It will be popular in the library so sign up now. I can recommend this book without reservation.

Vera Terrell—
Flower Arrangers Guild

Flowering Vines Etc.

Flowering Vines for Year-Round Color in Southern California 1967.

32 pages, paperbound; $1.00.

Third booklet in a series published by Los Angeles Beautiful, Inc., California Arboretum Foundation, Inc., and Southern California Horticultural Institute; the first two being: *Flowering Trees for Year-Round Color in*

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That Keep California Garden Growing

Southern California 1964, and *Flowering Shrubs for Year-Round Color in Southern California,* 1966. Each is illustrated with color photographs by Ralph Cornell, F.A.S.L.A., with text by horticultural specialists: "Vines" and "Trees" by Philip Edward Chandler, B. J.; "Shrubs" by Dr. Samuel Ayres, Jr. All were published under the direction of Dr. Ayres.

Those of you who already know the first two booklets in the series will pounce with delight upon this one. Here again, you will have sixteen full-page color plates, each illustrating one to four of the recommended plants, with descriptions and suggestions for use. Each is identified with its scientific and its popular name, if any, its family, country of origin, and temperature at which it may be severely damaged. Each is also keyed with symbols indicating special cultural requirements. Twenty-seven additional vining plants are listed and briefly described.

San Diego could easily become known as "The City of Flowering Vines." Why not? Vines come in so many shapes and sizes and lend themselves to so many uses that even though we may not have room for one tree or even one more shrub, surely we can find space for a vine of some kind, be it only a pot or window box. Vines can go up, down, under, over; can be flat, bushy, thick, thin; can cover a fence, decorate a wall, create a barrier; yield fragrance; add color; excite curiosity or amazement.

These booklets are small and light enough to be carried around, and if you do not know all the plants mentioned, one of the pleasantest ways to learn them is to match with pictures. The writers suggest that we do just that—learn the names, making their point with the fact that some of our flowering families are extremely large. After all, with acacias, for instance, belonging to an 800-member family, all yellow-flowered, we can't just go around saying "that yellow acacia."

So get this book; get some extras as birthday cards; get the set and you have a small gift for some lucky person; buy fifty and spread them around where they will do most good and give yourself points for a distinctly worthwhile public service.

Helen Witham, Wild Flower Chairman, San Diego Botanical Garden Foundation.

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MANIHOT *esculenta* or Tapioca

by Frank R. Mousseau

OF PRIME economic importance is the Tapioca bush. Native to the Amazon basin, it is now widespread throughout the tropical regions of the entire world. It is known variously as "Tapioca," "Manioc," and "Cassava," all names of tropical American Indian origin.

Tapioca resembles its cousin Poinsettia in size, growth pattern, growth rate, culture, propagation techniques, and in general appearance. The tapioca plant, however, has a better formed leaf. A small tapioca seedling makes a very handsome palmlike dish garden plant, both in its green and variegated forms. It accepts indoor life more readily than Poinsettia. The adult tapioca seeds readily and most of the seeds sprout quickly in our San Diego summer. At all stages it will do better with overhead protection from loss of heat by radiation. It will drop its leaves and die back to the main stem in our winter, but will quickly recover in the spring. A five-year-old adult ten-foot-high specimen has grown through the top of a lath house at Lion's Nursery, on Broadway, near "H" street, in Chula Vista. Your reporter's specimen grew about seven feet in six months, then, exposed to the winds sweeping up Mission Valley, dropped its leaves and outer branches in December. The central trunk, about five feet high and about ¾ inches diameter, remained alive and has sprouted again this spring.

The tuberous roots, which resemble sweet potatoes, form a carbohydrate food staple for millions, although the tuber contains cyanide and may not be eaten without careful processing to destroy the poison. In preparing the roots for food, the women of the jungle tribes of the Amazon peel the

Tapioca Tree MANIHOT *esculenta* at the Lyons Nursery in Chula Vista one of the first of its kind to be planted in this area has grown through the lathe-house roof, where, in the sun it blossoms freely.
—*Betty Mackintosh*

tubers, thus getting rid of the greater part of the poison which is concentrated near the skin. They grate the peeled tubers and cram the soggy pulp into a diagonally woven tube which is longitudinally compressed to its shortest length and widest diameter, they then draw the tube, by weights, into a long, narrow shape, exerting a tremendous lateral pressure upon the contents. The poisonous sap escapes through the interstices of the weave and the meal is dumped out, almost dry. What little of the cyanide is left is destroyed by cooking the meal into flat, tortilla-like cakes.

At a more sophisticated level, the villagers pack the peeled, ground tubers into a canvas tube, about 8 inches in diameter and about 8 feet in length. The top of the tube is tied to a tree branch, a bar is thrust through a large grommet in the bottom and the tube is twisted until the meal is wrung nearly dry.

At a manufacturing level all the processes are accomplished by machinery which peels, processes, presses, heats, and granulates the raw product. Commercial tapioca is prepared by this method.

The juice squeezed from the raw pulp is boiled down into a thick, black syrup. During this process the cyanide,—unstable at ordinary cooking temperatures,—decomposes into harmless nitrogen and hydrogen which escape into the air, and carbon, which remains deposited in the meal. This black syrup is known as "Casarip," or "Cassareep," and was the original Worcestershire Sauce. This sauce is now prepared with soy sauce and other substitutes for the original Cassareep. Cassareep, however, is widely used as a cooking sauce and tenderizer. Meat placed in a solution of this sauce will become tender overnight, no matter how tough, and will gain an excellent flavor. The meat and sauce will last indefinitely if heated two or three times a week. In the absence of refrigeration this is one of the most satisfactory and effective methods known of preserving meat in the tropics.

A particularly potent, sometimes lethal, type of jungle juice is prepared by the tribal women for use in ceremonies by the men. The tapioca meal is chewed, well mixed with saliva, spat into a trough, water is added, and the mixture ferments. This is the "Paiwari," of the Amazon jungle. It is offered as a greeting drink to all visitors. Refusal to drink may bring consequences ranging from embarrassing to downright dangerous, depending upon the martial history of the tribe. Even moderate ceremonial use of this beverage results in one of the better-type hangovers. Overindulgence usually results in extreme weakness, paralysis, and exhaustion for several days. There are no tribal alcoholics. Continued use results in a severe cough, general debility, and finally death. Fortunately for the continued existence of the tribes, the women never touch the stuff, and therefore are available to care for the men for the several days of incapacitation following one of their periodic binges. Since the use of Paiwari is deeply rooted in tribal customs, the Brazilian authorities are understandably reluctant, as a matter of policy, to take the necessary steps to eradicate its use.

How the Indians came to discover the secret of eating tapioca without a 100 percent casualty rate is a mystery to most botanists. An anthropologist, however, acquainted with the nature of the animist beliefs of the Amazon natives, might make an educated guess as follows:—there are lesser-known, (less satisfactory in yield,) types of Manihot, such as "Sweet Cassava," in which the hydrocyanic acid varies in amount, depending upon the season. Wandering tribes, acquainted with the use of these other Manihots, may have come across a grove of "Bitter Cassava" bushes. Members of the tribe may have eaten of the tubers and died. Believing as they did, it would seem logical that they came to the conclusion that an evil principle existed in the tubers, and that the evil principle might be exorcised by various maltreatments of the tubers, such as skinning, pounding, squeezing, and burning, which could then make it possible to eat the tubers without harm.

Intricate leaves of the Tapioca are a deeper green, and the foliage more dense when its environment is shady.
—*Betty Mackintosh*

Chinese Fortune

by Clifford H. Pope

A PLEASANT way to combine a study of gardening, history, and geography is to read certain books on exploration. No books on this subject are more timely and fascinating than those by Robert Fortune who explored China during the middle of the nineteenth century. The Encyclopedia Britannica has no separate article on Fortune, mentioning him but incidentally as the man who introduced the kumquat to Europe;—who showed that black and green teas were brewed from one and the same plant,—and for whom a Chinese species of Mahonia or Oregon holly was named. The standard American encyclopedia, Encyclopedia Americana, does better by him, giving an account of his life and works that covers a quarter of a page. He is also widely renowned as the explorer who introduced the Chinese tea plant to India, and transported hundreds of decorative Chinese plants to English gardens.

Fortune's first book and the one on which this article is based was published in London in 1847. The long and somewhat misleading title begins, *Three Years' Wanderings in the Northern Provinces of China.* In fact he explored southern and central China near the coast. His several later books tell of much wider travels that include India and Japan. Although these books are owned only by the larger libraries, interlibrary loaning makes them available to many readers.

A striking similarity between the relation of China to the rest of the world that existed in Fortune's day prevails again: No one is sure just what her potentials may be. For some time before the middle of the nineteenth century the West had conjectured on the possible hidden power of the colossus it so badly needed to trade with. China was arrogant and reluctant to admit the foreigners, who in turn were very impatient. There were vague rumors of enormous armies that might be aroused to swarm over the earth. The British were first to prove these rumors; they went to war with China in 1839. Immediately it became evident that the giant was impotent; the Manchu government was suffering from slow decay and shot through with corruption. The outmoded army and navy were powerless in their hopeless contest with the British.

Peace of a kind was established in 1842, and Fortune wasted no time in obtaining an appointment as Collector to the Horticultural Society of London. He sailed for China in 1843, arriving in Hong Kong four months later. The harbor was the finest he had ever beheld, but he predicted that the colony would be a failure. The British had but recently settled there and the mortality was appaling; most of the troops in one barracks had died of disease. Fortune, a man of extraordinary courage, set out at once on explorations that continued for three years, as the title of the resulting book indicates.

The difficulties overcome stand as evidence of this courage. In a tough district of the Canton suburbs he was pursued and robbed; one of the many ruffians in pursuit felled him with a missile. It is only fair to state that he had been warned to stay away from that area; he was, apparently, not only courageous but bold. On another occasion his pony, which he was cautiously coaxing across a weak bridge, fell through it into the canal. In the Ningpo district he nearly slipped into a deep and dangerous pitfall for wild pigs. Near Foochow the heavy rains forced him while collecting to wade in water up to his waist. Unless dressed in Chinese style he was constantly followed by crowds of the curious. These were usually civil and harmless, but once he was unable to hire a much needed boat because the boatmen feared that the throng would follow him aboard the boat and swamp it.

Sickness and tempestuous seas plagued him, not to mention pirates. Two storms, one after another in rapid succession hit his boat and he nearly lost his life in the second storm. He contracted fever three times, one spell making him deathly ill. Before well recovered from one fever he, single-handed, was forced to battle pirates attempting to capture the lumber boat on which he was passenger. The boatmen were too frightened to help in the defense; in fact, Fortune had to threaten to shoot the helmsmen if they deserted their post to join the rest of the crew hiding below.

All these misfortunes together give the erroneous impression that Fortune risked his life at every turn. By contrast he relates many pleasant experiences; frequently he was treated with great kindness. Once he was entertained with three hours of theatricals and then placed in a seat of honor at a feast that continued for some eight hours. Exhausted at the end of three or four hours and hundreds of proffered delicacies, he begged to be excused. It is little wonder that this alternation of pleasure and pain produced mixed feelings about the Chinese. On a single page he writes, "The convenience of inland transit is also unrivaled in any part of the world" and "I fully believe that in no country in the world is there less real misery and want than in China." In the region north of Ningpo his eye rested "on a rich and level plain, watered by its thousands of canals, and dotted all over with towns and villages peopled with an immense number of industrious and happy human beings." He learned that in Soochow a man could enjoy a hot bath, a private room, a cup of tea, and a pipe of tobacco

for eighteen cash, which came to something less than an English penny of the time. The bath alone cost just half that amount.

Yet he pulled no punches in accusing the Chinese of cowardice, deceit, and various other vices. He implied that Christianity is a "holier and purer" faith than those of China, and classed the Chinese along with other half-civilized and barbarous peoples. Once his foot went through the lid of a coffin in a shallow grave on a Chusan hillside with "skulls and bones lying about in all directions." During his travels he never saw a Chinese reading a book, though he did see pitiable opium smokers. The homes of peasants were "wretched buildings of mud and stone, with damp earthen floors, scarcely fit for cattle to sleep in." They reminded him of "what Scottish cottages were a few years ago." Since he was a Scot, presumably he knew about life in Scotland.

When Fortune went to China he took advantage of a recent revolution in methods of shipping plants long distances. Nathaniel B. Ward of London had devised the Wardian case glazed, water-resistant cases for plants that controlled light, heat and humidity. Formerly it had been estimated that a plant shipped from Macao, for example, had one chance in a thousand of arriving in good condition. The voyage of several months through many climates subjected the plants to conditions that made survival so improbable. In contrast, on one occasion Fortune got 215 of 259 plants safely transported from Hong Kong to England, an accomplishment that well illustrates the value of the new method. He accompanied this lot, taking daily care of the eight cases all provided with sliding doors and other improvements. Small details were important. For instance, the legs had to be long enough to allow the sailors to mop under the cases where they were securely lashed on deck. Fortune took the prudent precaution to divide his collections; during his first expedition he made several shipments, each dispersed among three or four vessels.

It would be impossible to tell in such a short article about the innumerable plants and gardens that Fortune described, let alone relate his experiences with Chinese gardeners, or include what he learned about their gardening, agriculture, sericulture, and tea industry. The reader will have to get Fortune's books and learn for himself. I am merely trying to convince readers that they will have their botany flavored with adventure.

Lead A Sheltered Life

NOW that the sunny side of the calendar is showing again it's time to seek the shelter of canvas.

Canvas awnings still do the day-to-day job of reducing glare and heat, cutting air-conditioning costs, keeping furniture and carpets from fading and guests from drooping. But they do much more than that. They let you live a sheltered life—inside or out—and in the very latest style.

This summer, there's a whole collection of new canvas designs for the fashion-minded homeowner dedicated to outdoor living. With just rope and easily-shaped aluminum pipe, the canvas fabric can be formed into a whole array of shapes and styles.

For instance: a giant, bright red canvas arc can shelter an al fresco buffet or serve as a colorful bench-cooler. On a more lavish scale, a striking loggia in a Cleopatra-like setting might be fashioned in distinctive black and white canvas . . . ideal for a poolside cocktail party or even a tete-a-tete.

How about an easy-to-install cover for your patio? You can create a novel roof of billowing fabric by supporting a canopy of canvas on overhead wires. The canvas is suspended from the wires by metal rings. With a series of pulleys and rope, you can fold the canvas back under the eaves or extend it full-length to regulate the sun and shade.

Canvas just about satisfies any individual taste. There's a graceful cone-shaped Camelot pavillion, all done up in tassels, a valance, and a pretty peak. It can serve as a cool oasis on a wide expanse of lawn or can shade a corner of exposed terrace. You can even dress up a carport with weather-resistant canvas curtains that will soften building lines and make a drab area colorful. *(continued on page 30)*

Crown Canopy hung from supporting tree limb provides a colorful spot for relaxing in the garden.

San Diego, Birthplace of Many New Dahlias

by Larry Sisk

BECAUSE San Diego is recognized as the birthplace for many top prize-winning varieties, dahlia fanciers all over the world keep their eyes on the annual show of the San Diego County Dahlia Society.

The show this year is Saturday and Sunday, August 5 and 6, in Balboa Park's Conference Building.

For many years, the San Diego show has been the first of each new growing season, although occasionally one of the other California societies books its show a week ahead to avoid later conflict of dates. Through the Pacific Southwest Dahlia Conference, the 11 affiliated societies try to stagger dates to make it possible for growers to attend more shows.

For 26 years, the early San Diego show has seen many of the world's big winners for the first time. They have been mostly the originations of one grower, R. Paul Comstock of Solana Beach.

Other famous dahlias, however, originated by other growers, also have had their beginnings on the San Diego exhibition bench. These have included the ancient, but still popular, **Five Star General,** a giant pink formal developed by Cy Ramage of Chula Vista; **Princess Dianne,** a dark red, by Roy Partain of San Diego, and **Hazel Harper,** standard pink miniature cactus, by the late Mrs. George Harper of San Diego.

A current world-beater, giving strong competition to some of the Comstock varieties, is **Sterling Silver,** a beautiful white formal, developed by William Eichman, also of Solana Beach.

Excellent varieties from other Western growers also have been shown in competition in San Diego for the first time, and have gone on to win world acclaim. Several of these have included originations of Nat C. Lundgren of Santa Cruz.

Many blooms of **Hazel Harper, Sterling Silver,** and Lundgren varieties, including **Goldie, Louise McKelvey, Iva Jean,** and **Orchid Princess,** are expected at the San Diego show this year to amass more honors.

In the 40 years he has been growing dahlias, Comstock has originated and introduced 42 varieties, all of which have won major awards of some kind, world wide in addition to San Diego and California shows.

This year's crop, tested in his Solana Beach garden for the last three or more years, has promise of being one of his best, Comstock said. He hopes several of the new seedlings will be blooming so that he can show them in the Conference Building.

He has sent several of them to the nine trial gardens of the American Dahlia Society for their first testing in other parts of the country. In addition, he hopes to have sufficient blooms for competition at the other California shows in the American Dahlia Society Seedling Sweepstakes and Achievement Classes.

Varieties scoring highest in the trial gardens win the coveted Derrill Hart Medal, and those with the best first-year show record win the Lynn Dudley Medal, honors much sought by all dahlia hybridizers and originators.

Comstock has been one of the most consistent winners. He was the first to win three Derrill Harts, and then became the winner of his fourth last year with **Marguerite M,** a medium size lavender formal, distributed for the first time this year. His first three were for white dahlias, all still famous: **Mouney C,** white florist-size formal; **Florence Chadwick,** medium white cactus with tips blushed with lavender, and the current largest-in-show world champion, the white informal giant, **Lula Pattie.**

"I hope that the varieties that I have sent to the trial gardens this year will bring me the medal in both the medium and giant sizes," Comstock said. "I know my dahlias will give a lot of trouble to any which try to beat them."

His best large ones—called A Size—this year already have been named, ready for introducing next year. They include **Col. Eddy, Fleeta M,** and **Tillie Johnson,** which he will try to have on the show bench for the first weekend in August.

"**Col. Eddy** is a dahlia that will be classified in the bronze color class," Comstock said. "It grows about 12 by 9 inches. The plants are about 4 feet high for me. Stems are strong and the foliage is excellent. All blooms are very uniform as to size and the plants do not vary in height. Actually the coloring is a dark buff and gold with shading of red toward the center of the bloom. It is an informal decorative, and will have the best chance of all my A-Size new ones.

"**Col. Eddy** is named for a long time friend of mine who lives in Encinitas and who wrote for Flower Grower Magazine and tested dahlias for a number of years. Although he never was a commercial grower, he imports and grows many dahlias from all over the world. At one time he had several thousand plants including 500 seedlings in his garden."

Fleeta M also is A Size, achieving 10 by 6 inches, a pure white. "This one is named for Fleeta Mongerson of Bakersfield, a grand young lady of 83 years," Comstock said. "She has long been associated with dahlias, iris and roses in the Bakersfield area. She still is very interested and this pure white flower with long, good stems is my special tribute to her. **Fleeta M** plants are excellent and the semi-cactus blooms are good keepers."

Comstock describes Tillie Johnson, whose name also has been chosen, as "another grand lady," a resident of Inglewood and the mother of Thelma

Johnson, a former president of the Inglewood Dahlia Society. The team of Tillie and Thelma Johnson is well known at San Diego shows, as well as in other Southern California exhibitions.

"**Tillie Johnson** is a fine large pink, laciniated informal decorative," Comstock said. "It has very wide petals, quite deeply laciniated. The petals are two-toned in different shades of pink, with a real cream center. The blooms, about 10 or 11 by 7 seem soft, but they keep well when cut at the proper stage. The stems are long and the very strong foliage is good, on a strong-growing plant."

Col. Eddy and **Fleeta M** have been sent to all nine trial gardens. With them went a medium yellow formal, a spectacular dahlia named **Edna C** for originator Comstock's wife.

Edna C is a shade lighter than Comstock's earlier medium yellow formal, **First Lady,** introduced in 1955 to become the top dahlia winner all over the world for the next 8 to 10 years.

Blooms of **Edna C** are 8 to 9 inches across and with equal depth. Its petals fold back and wrap around the stem to give the appearance of a large solid yellow ball. The solid effect comes from the fact that it has 405 petals by actual count, compared with only 180 for a good bloom of **First Lady.** In addition to excellent form, the bloom rests atop strong stems from 3-foot plants.

"Every bloom of **Edna C** seems to be of show caliber," Comstock said. "Since I have been growing it and showing it in the early seedling classes, I've had requests for it for two years from all over the country. I pick this one as my best and strongest contender for the Derrill Hart Medal in the medium class."

Comstock has another new one of which he has sentimental pride. He has named it **D.O.T.**

"The name comes from the initials of a school teacher in the San Diego area," Comstock said. "The request for a beautiful flower to be given the name came from an old friend of the teacher, and under the circumstances, I was pleased to acceed.

"**D.O.T.** is an incurved cactus medium, dark lavender, produced by a thrifty growing plant and a prolific bloomer that I have used in supplying dahlias for the cut flower trade. The blooms are about 8 by 5 inches, the foliage good and the stem strong. The plant also is a good root maker."

Among other new dahlias, Comstock grown, is a medium cactus red, originated by Frank Norell of Encinitas, named **Kathy Sullins,** which Comstock describes as a fine dahlia.

"I have quite a list of others," Comstock said, "and there are several very good ones left for future showing. Among these are some exceptional ones I am saving back for our 200th Anniversary and National Dahlia Show in San Diego in 1969."

And when Comstock says they are exceptional they are, because he knows, and other dahlia fanciers know he knows.

For the last several years the Solana Beach garden has had 1500 to 3000 seedlings growing each year.

"After long experience and trial, I have come up with some real good seed parents, and have gone back several generations on some of my most consistently good varieties," Comstock said. "I used to get one real good one in a thousand; now I find I get one in about every 250. This is due to seed parentage and good selection of plant stock from which seed are taken."

In addition to the named new ones, others of those "real good ones" will be seen in the various seedling classes at this year's San Diego show. And it's a good bet that among them also will be more winners-to-come, to join this year's crop and the famous ones that have included others that are known as **Miss San Diego, Maureen Connolly, Helen Hayes, Art Linkletter, Groucho Marx,** and **Jody Gregory,** all still among the big winners.

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Marguerite M lavender formal decorative, B size, about 8 by 6, is placed on the market for the first time this year.

A Japanese Styled Garden In San Diego

(The Garden of Murata Pearl Japanese Village, Sea World)

by Kinya Washio

IN CALIFORNIA, it would be the fact that many of the people who love flowers or gardens have lots of interest in Japanese gardens. What is a Japanese garden? It is a very difficult question to answer clearly in a word.

A great number of Japanese gardens have existed for more than a thousand years in Japan and many of them still retain most of their original beauty and shape. You may see them abundantly in Nara and Kyoto districts in Japan.

In the whole history of Japan, Japanese people have created their own unique cultures under the cultural current from China. On the foundation, well digested, of Chinese and Buddhistic cultures, the Japanese garden has evolved through understanding of the climate, the land, the emotion and the behavior of the people of each era. Those Japanese traditional cultures generally respect nature and present the attitude and philosophy of their lives. Geographically detached from the Asian continent and not conquered by other races, Japanese ancestors had quiet spiritual communion with the influence of Buddhism and beautiful natural surroundings. It was the distinguishing character of the rich-class people to own houses and temples with well-designed gardens.

Japanese gardens with the background above-mentioned, respected nature but tried to improve on nature. It does not necessarily mean to bring a part of natural landscape into the property or make a total landscape in miniature. The eminent Japanese garden designer caught the beauty of total or partial natural landscape through his eyes and assimilated what he observed; then he analyzed it in abstraction and idealization sensuously before he recomposed it. Usually he practiced a symbolic technique to realize it, using chiefly natural materials.

In Japan, a garden is called "Niwa" —originally meaning an outdoor living space as compared to "Uchi" (house or indoor). Some Japanese gardens are merely pure artistic works with no value as outdoor living in the modern sense of the term, but well-planned Japanese gardens were utilized as outdoor living space by our ancestors. This fact shows more value of Japanese gardens than their artistic worth. Therefore, the general features of Japanese gardens are the stage for the outdoor life of the owner closely related to the architecture, providing a quiet and calm environment, constructed by a symbolic technique respecting nature.

On the other hand, just as California gardens have many kinds of style and grades—Japanese gardens are not always excellent. Especially since mid-Edo era (250 years ago), many of them just imitated former famous gardens or only collected characteristic trees and strange-shaped rocks. Nevertheless, people tended to be interested in them only because they looked unusual even when they did not have any good design or function. There are many instances where such kinds of gardens have become famous because not only foreigners,

Golden Pavilion at edge of lake and Bell Tower near entrance of Sea World's Japanese Garden.

but even Japanese professional landscape designers have often been tricked by unusual designs. These gardens scarcely have good functions, principles or good taste presented by the owner or the designer. If a garden is created to be lived in and not just to be viewed as a wall picture—it should not be novel or bizarre in design.

On the understanding of Japanese gardens as stated above, the garden of Murata Pearl Japanese Village was planned for the Japanese styled garden of the public recreation park in San Diego by Professor T. Kubo and Associates, University of Osaka Prefecture, Japan. Wimmer and Yamada, Landscape Architects, San Diego, provided the planting and the irrigation plans; Kajima Construction Company designed the concrete wall and wooden fences; and George Yasuda, Landscape Contractor, San Diego, worked for the project under the supervision of Professor Kubo. It was completed in March 1964 and has been taken over by the author to maintain.

The first step in planning involved over a year of intensive study of the position of buildings, the staging of shows and exhibitions and potential viewing points, including the layout of walks and paths, recognizing also that visitors would spend on the average of from 45 minutes to one hour to enjoy the whole village. Selection of the show and exhibition area at a single location avoided creating a noisy atmosphere throughout the whole property. Because of the flat topography of the lot and the heterogeneous design of the main part of Sea World, the Japanese Village needed effective enclosures to keep its own unique environment. A large fresh water pond was planned presenting the image of a sea coast feelingly connected with pearl diving of our main show. Besides, it would also be very important as the reflecting pool of the Golden Pavilion, the glorious architecture.

The architecture of the Japanese Village consisted of the main building called "Golden Pavilion", the demonstration house, the bell tower and the entrance building. As all buildings in two acres are in one view, the building lines were laid out entirely parallel. Following this principle a garden fence and a viewing deck were set up also in parallel to make the whole view uniform. Abundant uses of straight line in the structural design may weaken the impression of the architecture to the visitor's eyes and emphasize the natural character of water, plants and rocks and enhance the beauty of curved lines of the beach and walk.

Restful Atmosphere Conveyed by Bamboos, Maples and Other Shrubs are reflected in Quiet Stream Admired by Visitors on Bridge.

To accent the effect of the proportions of the architecture to the property a few delicate designs were used in the main garden. You may see the beautiful patterns of lawn, pebble beach, walk planting and lake in quite large scale. To avoid the appearance of monotony there are various slopes and mounds in the lawn and several cascades give variation to water flow.

The lawn trees and shrubs by the stream were installed to provide accents and to increase the beauty of the water and its reflection. We are keeping them very low, or tall and slender for this effect. Plantings along the structures are shaped to make the architectural lines conspicuous and their natural form contrasts with the structures. In such a design field, rock arrangement should be only for the accent of beach line or lawn, avoiding having them exposed too much.

The rock garden has become very famous because of the renown of the garden of Ryoanji Temple. We arranged rocks in 7-5-3 magic numbers originated from Buddhism like the Ryoanji's. One of the main reasons for using white sand in rock gardens is the lighting for deep and dark rooms of temples. At the same time it is also very effective to contrast with green leaves, clay tiled roofs and adobe walls in these old temples. In the brighter sunshine of Southern California with the tall white concrete wall, the green cover of Irish moss was selected for refreshment instead of white sand glare.

There is a fairly large-scaled waterfall making cascading sounds at the back yard of the Golden Pavilion. A natural designed waterfall would be one of the most difficult subjects in a flat lot and the image of the designers was not realized too well in this case. I am hoping that it will have a better look when the forest in the background attains maturity.

As I mentioned before, Japanese gardens are not monotonous even when simplified. In the main garden of the Japanese Village there are only strips of lawn, with mounds, a pebble beach, several small pine trees, a few Carissa and bamboo plantings, with mossy rocks along the water. The general opinion is that such design is too monotonous for a site as large as this. These materials should, however, be recognized as the stage setting for the main actor, the "Golden Pavilion" and its reflection in water. This remarkable building with its pure gold walls should be ranked first in the landscape, showing various beauties from all directions. Too technical inspection of the workmanship often dulls the appreciation of the beauty and the atmosphere in landscape. In this case, it was the original intention of planning to provide the atmosphere people feel when they are in Japan, instead of following traditional Japanese theories of design.

When visitors come through the entrance into the garden, they may well be amazed at the glorious building rising closely and magnificently before them. Then the sound of a bell leads them to the bell tower over a bridge and a short distance beyond.

Still hearing the long-lasting impressive sound of the bell, people once turned from the bell tower to discover the Golden Pavilion reflecting its whole beautiful form in the water—a sight which provided the photographer his finest vantage spot in the village. Unfortunately this view is now hidden by the stage which was built because of the unexpectedly large number of people now visiting the village.

Originally, too, an entirely new vista burst on the eyes of the visitor as he proceeded past a high bamboo fence and entered the platform to observe the pearl diving show just announced. This surprise also had to be sacrificed because of the growing crowds.

Many people enjoy another Japanese atmosphere in the tea ceremony and the flower arrangement presented by Masters from Japan. From the second floor they may also see the aerial view of the bell tower and the pattern of the garden beautifully.

On the way out through the Golden Pavilion, the lake—reflecting the white wall and the Chinese-styled windows and the natural stone bridge above the small cascade with its surrounding landscape, please the eyes of the visitors.

Changes in operating procedures brought new situations that could not be anticipated at the planning time. Speaking only about the garden, the noise of too many visitors, especially in the summer season, intrudes on the quietness of the landscape and the additional structures hide or spoil some of the best scenery.

It must be the irony of fate that these situations so distressing to the garden lovers should take place due to the demands of business. They happened during the development of the enterprise and unfortunately were not foreseen in the planning stage of development.

Japanese gardens are planned to provide an atmosphere of quiet and calmness. If you feel the tranquility of walking in a Japanese atmosphere when you visit the Murata Pearl Village you may well understand what the planners and maintenance staff have worked so hard to achieve, even though so many compromises have had to be made.

The Oldest Plant in San Diego County

PRIMITIVE SEQUOIA NOT PREVIOUSLY IDENTIFIED

by Susan D'Vincent

IN EARLY October, 1964, a geology field class from San Diego State College was working in an area east of Rancho Sante Fe in San Diego County, in an effort to determine the geologic history of some ancient volcanic rocks. The geologic age of these lavas is believed to be either very late Jurassic or early Cretaceous, between 130 and 140 million years old, a time when the dinosaurs were flourishing.

It had been a long, hot day and as the students were crawling back through the chaparral to their cars, they came across a large, unusual appearing rock. It looked like a short section of a column, having a diameter of approximately 15 inches and a length of about 6 inches. One of the students naively suggested that it may be a piece of petrified wood, not knowing that fossil wood of that great an age had not been found previously in southern California. This was rejected in favor of a more plausible idea, that it was a filling for a volcanic pipe (long tubes formed by gas in cooling lavas).

However, upon closer scrutiny they were amazed to find what looked like the growth rings of a tree. Taken back to the laboratory at San Diego State College, a thin section was cut and examined under the microscope. (A thin section is a slice of rock glued to a glass slide, then ground down so thin that light can easily pass through it.) Examination revealed the unmistakable structure of the cell walls of a plant, proof that it was petrified wood, and therefore the oldest plant known to have grown in southern California.

Having ascertained that it was indeed petrified wood, identification of the species posed a greater problem, as there are very few paleobotanists who are experts on flora of that age. Thin sections were sent out to three different experts, and the closest identification they could give to it was that it was a primitive sequoia, probably similar to the ones living today in the redwood groves of northern California and in Sequoia National Park. The reason further identification is difficult is that this species appears

Polished section of ancient petrified Sequoia, shown by author, is now on display in the Department of Geology at San Diego State College.
—Photo by Edwin Gookin

to be the first of its kind to be found.

Geologists are always glad to find fossils in the rock units they map, because fossils not only can give an indication of the age of the rock, but also of the climatic conditions prevailing when it was formed. The presence of these fossil trees represents a cooler climate with much greater rainfall than we now receive in southern California. The weather was then probably comparable to that found in the northwestern United States and in the Sierra Nevada.

The area in which they had lived was intermittently volcanically active for a period of millions of years, as evidenced by the many layers of lavas in which the petrified wood is found. The trees grew on older, decomposed lavas and were engulfed by the lava and ash from later eruptions. The fact that these trees were living among lavas and were ultimately covered by them, is the reason why they have been preserved as petrified wood. For a plant to undergo petrification, it must not be allowed to decompose, as it would naturally do if left exposed to the air for any length of time. Therefore they must be covered over shortly after they die in order to preserve them.

Petrification of plants is not a situation where the plants actually turn to stone, as many believe, but it involves a process of replacement. Rock forming compounds, primarily silica, calcium carbonate and some iron oxides, are dissolved from the rocks above the wood by water percolating through them. Then as the fluid saturates the wood, it slowly replaces the cellular material, molecule by molecule with these compounds. In this manner a piece of wood may be preserved even down to the most minute details of the cell. Thus in this San Diego County area, the lava which covered the trees provided the rich source of silica for replacement of the wood. As a result, the section of petrified log found has survived weathering for over 130 million years and can now be studied by us today to interpret conditions as they were in the past.

The piece of petrified sequoia described above, the oldest known to have lived in southern California, is on display in the department of geology at San Diego State College.

PEST SURVEY

Step Toward Eradication

FOR the second year, personnel from the San Diego County Department of Agriculture are participating in a residential grid survey. This planned survey uses a scientific approach in attempting to detect new pests of agriculture. The well-trained personnel search for unusual insects, plant diseases, weeds, nematodes, and other pests.

The residential survey is planned so that one block will be surveyed in each half-mile square of the approximately 300 square miles of residential area in the County. In each of these blocks, four properties will be inspected. The County's residential areas will be surveyed this way annually, but a different block will be inspected each year.

Mr. James M. Moon, San Diego County Agricultural Commissioner said, "Plant pests can enter the County in many ways, and it is believed that residential properties are one of the most likely places to find these 'hitchhiking bugs.' " Many of the most serious plant pests have been found in non-agricultural areas, and eradication can be attempted before they can become established in commercial plantings. Several of these pests are also harmful to ornamental plantings. Last October, for example, a San Diego residence was found to have gardenias infested with the citrus whitefly. This pest is a threat to the citrus industry of the State, and efforts to eradicate it began without delay.

Department personnel working on this survey will give the homeowner contacted a written explanation of the program, and will request permission to inspect the property. Two persons will form a survey team, and they will identify themselves as representatives of the San Diego County Department of Agriculture.

"We ask the cooperation of each resident contacted," Moon added, "as the survey will not only benefit the County's multimillion dollar agricultural industry, but it will also help the homeowner who is faced with a continual battle with plant pests which are already well established in the garden."

AMERICAN DESERTS: FORGOTTEN WILDERNESS

by Maxine E. McCloskey

"THERE'S just gotta be mineral in those rocks; no piece of country could be so gosh-darned worthless," said a packer at first sight of the arid canyons in southeastern Utah some thirty years ago. While the urge to make a profit from deserts, as well as from most other unoccupied lands, is still prevalent, there is a growing awareness of the noncommercial values of these exotic lands.

Three speakers in the session on "Forgotten Wilderness" of the Sierra Club's Tenth Biennial Wilderness Conference, held in San Francisco last April, told the audience of one thousand of the cultural, aesthetic, scientific and recreational values of the vast desert areas of the western states. Boyd Rasmussen, Director of the Bureau of Land Management, said: "The deserts of the West are filled with strange and unique things—plants and animals, mesas and canyons, things that have no dollar value at all but which are very priceless in their own way." Because the greatest part of the deserts remain in the public domain, that is, they are administered by Mr. Rasmussen's Bureau, it is significant that in 1964 Congress granted the BLM authority to classify its lands for their best possible use, including wilderness.

Charle B. Hunt, Professor of Geography at The Johns Hopkins University, stated: "The greatest asset of the desert is its aridity. This is the main reason why the Colorado Plateau has two dozen national parks and monuments." These include the extraordinary erosional displays of a part of the Grand Canyon of the Colorado River (only one-third of the Grand Canyon is protected in the Park) and the recently enacted Canyonlands National Park in Utah.

Dr. Walter P. Taylor, Emeritus Professor of Conservation Education at Claremont Graduate School, said: "The desert possesses unplumbed resources. It may serve not only for the up-building of man's material welfare, but also for the enrichment of the human spirit. We would do well to remember that the world's dominant religions were born and evolved on the deserts."

In stressing the values of desert regions and explaining their problems, these speakers are in the forefront of a new surge of public appreciation of these lands. That the Sierra Club devoted an entire session to consideration of wilderness areas other than those in mountainous regions in its Tenth Biennial Wilderness Conference is significant. This major conservation organization acknowledges the existence and worth of other kinds of wilderness: deserts, caves, shoreline, wild rivers, and underwater areas. Undoubtedly future Wilderness Conferences will explore the last remnants of isolated lands and waters which are now feeling the rapid pace of development.

The concept of wilderness is not limited to mountains and forests. The historic **Wilderness Act of 1964** defines wilderness "as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not re-

JOSHUA TREE
NATIONAL MONUMENT
NEAR SQUAW TANK

main." In practical terms this means any area without roads or development. Everyone is familiar with the frontier spirit which impelled modern men to tame the continent. In too many cases this meant destruction—mining, timber cutting, farming, grazing, dam building, and the contemporary suburbanization or "slumification" of fertile farm lands around urban centers. Evidence of this impact is everywhere.

Wilderness simply means unconquered nature, and less than 2% of the area of the contiguous states constitutes preserved wilderness today. Those of us who experience wilderness find it friendly, hospitable in its season, and refreshing. It is a sanctuary wherein we escape temporarily from the demands of urban existence and gather sustenance to return refreshed to our concrete cities. For an increasing number, this refreshment can be found in the fragile desert lands of the American West.

The three conference speakers vividly portrayed the unique attractions of the desert: scientific interest in the flora and fauna which have made remarkable adaptation to the minimal annual precipitation (less than 10 inches); geology, climatology, archeology and history; beauty in the dunes and volcanic formations; variety and unique forms of land, intensity of colors, and spaciousness.

But deserts have suffered at the hands of public and private agencies in the following ways:

—Extensive military activity which destroys desert vegetation and animal life, and devastates the landscape; commercial development of every kind, including subdivisions built on shifting sands; dust producing cement plants; deep scars from mines, overgrazing to the point that some plants have been completely removed (overgrazing also contributes to soil erosion and instability); importation of irrigation water to produce surplus cotton or build golf courses; the usual billboards and power poles with lines which are not easily lost in the wide-open terrain; roadside curio shops which plunder archeological remains; zoos which make captured animals wretched; and bounties on such wild animals as the vanishing coyote, whose plight Professor Hunt stressed.

The Sierra Club's motto for wilderness outings is that "wilderness will be preserved only in proportion to the number of people who know its values first hand." Many well-watered mountain areas below the drier high country have a capacity to recover from heavy recreational usage. Visitors' garbage and refuse will eventually rot or disintegrate, or be covered over by greenery in many instances. In addition, mountain users are increasingly careful not to leave litter for the next passer-by to see. Similarly, if the great American deserts are to be preserved only in proportion to the number of people who know their values first hand, desert travelers must honor the fragile dry land. Discarded refuse does not rust or break down easily, nor is it covered by foliage. Car tracks in the fragile soils remain unobliterated for years. Pollutants are not washed away. Thoughtless digging, road cuts, or dunes buggy driving leaves persisting imprints and causes erosion. The search for Indian arrowheads, pots, and other artifacts spoil sites of archeological remains. Purple bottle hunters hasten the disintegration of historical sites.

Dr. Taylor said in summary that we all recognize the desert contains a wide range of objects of intense interest, some of them commercial, others recreational and inspirational. "We can be sure the commercial features will secure adequate attention. It is for us to see that the others are given their share of support and protection."

SAN DIEGO DAHLIA SHOW ENTRIES

SAN DIEGO'S big dahlia show, Saturday and Sunday, August 5 and 6, in Balboa Park's Conference Building, will be the 27th annual exhibition of the San Diego County Dahlia Society.

In addition to the famous classes in which seedlings are judged for the first time and the popular competition in the small dahlia classes, the artistic design-arrangement section has become one of the big attractions, according to Gerald K. Lohmann, society president.

Mrs. R. M. (Mildred) Middleton is arrangements chairman, and with the help of other arrangers, she expects to have more entries than ever.

At last year's show there were 103 entries by 34 exhibitors, including several accomplished men arrangers.

Because of poor growing weather immediately before last year's show, entries were down, but with much better conditions this year, another record exhibition is expected, Lohmann said. More than 6000 dahlias are expected to be on the show benches, with more than 100 exhibitors expected from all over Southern California.

The show will open to the public at 2 p.m. Saturday, August 5, and at 10 a.m. Sunday, August 6. Closing time is 8 p.m. Saturday and 6 p.m. Sunday.

Dahlias of all sizes and colors (except blue) will be shown, from tiny ones under one inch to the large ones up to 17 inches. A score of major awards are offered in the more than 600 classes.

Fish Creek Wash in the Anza-Borrego Desert State Park, San Diego County, Elephant Knee Mountain in left background, Smoke Tree, *Dalea spinosa* in foreground.
—*Betty Mackintosh*

Some Highlights Of The San Diego Fair

by Vera Morgan

THE FAIR FLOWER SHOW is now a pleasant memory. The outstanding effect, still vivid in memory is one of color, like a kaleidoscope,—changing patterns every time one turned, but each a pleasing harmony of color, contrast and line.

From one's first entry, down the Avenue of Flags, bordered with the huge, colorful Tuberous Begonias, wearing the Blue Ribbon for Howard M. Voss, on the shady side of the walk to the gay gerberas, (award winners for the Thurmans), lifting their colorful faces at the bidding of the sun, there was color everywhere;—pleasing lines and also sound to complete the harmony, with the soft drip and the faint music of sparkling running water.

Entering refreshed, the kaleidoscope turned to colorful banks of specimen flowers, each a perfect entity. Then next the soft greens and muted colors of the shade and house plants, and into the open spaces. Here is shown landscape use of specimen shrubs and plants arranged to show their qualities by contrast with each other. There was much blue and white to cool and refresh after the blaze of color elsewhere. Of course, with our climate, the tropical landscape takes an important role, and Dorothy S. Behrends captured the quiet beauty that can be achieved with leaves and line. Also awarded a Blue, was Janice M. Kay's tropical plants, showing variety and selectiveness.

Tarvin's of Olivenhain, for the second year, justly wore the Blue Ribbon in the Landscaped Garden Class, as the many pictured reproductions show to all. Outdoor Living landscaping stressed the pattern achieved by carefully selected and planted succulents. San Diego Cactus and Succulent Society Blue Ribbon winner rested in this garden, you can be sure, after the labor of putting it in. In contrast, the North County Shade Plant Club's winner showed a combination of annuals, perennials and shrubs to produce a garden of quiet restfulness. The gloxinias and coleus displayed in Gilbert A. Voss's Blue Ribbon display could have continued this same feeling. Irene Christopherson's Patio garden entry showed well-grown plants that one could live with happily while admiring its Blue Ribbon. The County Line 4H Club's landscape garden, planned for liveability, showed promise for future garden club leaders here in San Diego County.

A Succulent Garden with all the plants named and numbered meticulously on a beautiful chart, won a Blue for the Palomar and Cactus and Succulent Society, as did also their Cactus Garden which had a Mexican accent with the plants, large and small in the great variety of forms which characterizes this type of garden.

The Bonsai display, much larger than last year's, always rated a crowd, —partly due to the flower-like Japanese girls from Sea World, who, in native costume, interpreted the formal Japanese Tea Ceremony, on a raised platform over a pool at the entrance to the Blue Ribbon display of Euclid Nursery. The perfection of the potted plant displays shown each year, sets a challenge to the indoor gardener, as did Effie Hardin's display plants for interiors. No one can say that he has no space for gardening when they show you what can be achieved in a small space if planned and grown carefully. George F. Evans collection of potted plants is looked for each year, for each is so perfect that one wonders

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Howard Voss' tuberous begonias were framed by a stream in the Japanese manner complete with goldfish echoing one of the begonia colors.

—Betty Mackintosh

if they can be live or perfect reproductions. The striking forms and color of the ever popular Bromeliads, with outstanding specimens proudly displayed by the San Diego Bromeliad Society rated not only their Blue Ribbon but much amazed conversation.

Specialty displays, — always anticipated and looked up each year by the real garden buffs, included Blue Ribbons to Walter Watchorn for his begonias; Bill D. Spann for his ferns; Annabel Stubbs for her fuchsias. Special work and training of their plants brought the coveted Firsts to Cleovis Hardin for grafts on Cacti; to Dorothy M. Talnadge for her original coaxing of many types of plants not usually seen in hanging baskets, and to Allan Christopherson for his masterful handling of Tuberous Begonias in hanging baskets. The Platycerium displays of Stephan Talnadge are a cynosure of interest to the many men and a growing number of women who rate these as their foremost growing hobby.

Devotees of miniature or dwarf plants found Don Herzog's Blue Ribbon variety of examples, a challenge to emulate. Pelargoniums and geraniums are grown by many, but few as perfect and discriminating as those grown by Stephan and Alice Toker. These are a real challenge to the gardener who chose to grow them because they are "easy work." Bill J. Gunther reaped many Blue Ribbons in the field of cut flowers by grower because of the great variety of irises that he entered;—many of which had never been seen here before.

James M. Kirk's Rose Garden display and the display of the San Diego Association of Nurserymen had viewers, with notebook in hand, writing their next choice for purchase. Grandma's Garden was grown for usefulness in the kitchen, but color and beauty were not omitted, according to the interpretation of the Santa Maria Valley Garden Club which wore the Blue Ribbon.

Franz and Shirley Taschers' Orchid display; R. H. and Rita Collins' carnations and dahlias and the numerous awards for all classes in dahlias by Victor and Betty Kerley rewarded three of the outstanding husband and wife teams in this area.

The beautiful fresh looking and fresh-kept specimen blooms reaped so many awards to outstanding hobby growers that all cannot be listed. But, safe to say, these growers will all be entering again next year,—together with their neighbors. No wonder that this is the largest and fastest growing County Fair Flower Show in the nation.

SPECIAL AWARDS GIVEN AT THE CLOSE OF THE SHOW ARE ANNOUNCED.

The Grand Award goes to Howard M. Voss, who was rated the most outstanding contributor to the Fair and he well deserves it for he is probably known to more people than any one else that shows at the Fair.

Awards for outstanding maintenance of exhibits during the whole Fair went to:

CLUBS: Lakeside Garden Club and San Diego Cactus and Succulent Society

GROWERS: Richard H. and Rita Collins

HANGING BASKETS: Allan Christopherson

NURSERIES: San Diego Chapter California Association of Nurserymen and Lakota Indian Dancers Juniors

CUT FLOWERS: Vic's Carnations.

ROSE EXHIBIT HOST AND HOSTESS: Mr. and Mrs. Harry Cutler. He is President of the San Diego Rose Society.

KATE SESSIONS MEMORIAL AWARD. Again the Victor and Betty Kerley team won this coveted prize with 400 points to their credit; he with cut flower entries and she with corsages and with arrangements of all kinds and sizes of dahlias.

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Elementary Horticulture, Plant Pest Control, Soils and Fertilizers, Turf Grass Management, and Ornamental Plant Identification are only a few of the subjects offered.

San Diego Mesa College also has a fine program in ornamental horticulture. Lawn and Turf Culture and Management, Landscaping, Principles of Plant Growth, and Plant Materials, are some of the courses offered.

This is your opportunity to improve your knowledge in ornamental horticulture.

For more information about these educational opportunities, inquire at either:

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or

Office of the Dean of Students
San Diego Mesa College
7250 Artillery Drive
San Diego, Calif. 92111

—*Flower & Nursery Facts*

TARVINS' OF OLIVENHAIN exhibit was a partially shaded outdoor living room with canopy, furniture and flowers in a blue and white color scheme.

—*Betty Mackintosh*

Calendar of Care

Garden Care for August and September

by Robert H. Calvin

THE MOST important routine in your garden is watering. Judging from the number of questions asked every nurseryman it is the least understood aspect of garden care. Plants die from a lack of water or from overwatering. Another frequent cause of plant failure is setting the plant deeper than the soil level in the can.

The proper application of water calls for good judgment on the part of the home owner. Skill in watering, comes from practice, and close observation of the conditions which govern the amount of water each plant requires. The basic principle of watering is to water thoroughly and infrequently. This becomes especially important during August and September. Deep soak and then do not water again until lawns, shrubs and trees begin to show signs of needing it. To grow Gardenias successfully without the leaves turning yellow, soak and then do not water again until you see the top growth start to droop. Camellias, fuchsias, begonias and some large-leaf varieties of shrubs,—watch the leaves, they will indicate when they need water.

There are many factors involved in how often to water and how much to water. Soils usually fall into three basic types. 1. Sandy 2. Loam 3. Clay or adobe. Sandy soils — water penetrates rapidly, requiring only five gallons of water to penetrate two feet deep in a basin two feet across. A loam soil has a denser texture and requires eight gallons of water to penetrate the same area 2 ft., deep. An adobe or clay soil requires 13 gallons of water to penetrate the same area 2 ft. deep. The number of days between watering will be more according to the amount of water applied. Many shallow rooted plants have roots that go down into the soil 2 ft. deep and many trees ten feet or more so our method of watering becomes all important. It becomes obvious that trees planted in a lawn or ground cover will require additional watering beyond the amount of water we apply for lawns and ground covers. The subsoil irrigator is best for this type of watering.

Sprinklers: A hand held sprinkler is a lot of fun to use and it has a definite use in the garden but not to actually water the entire garden. Most shrubs are benefited by spraying the foliage with water, also it is handy to keep the surface of a newly seeded lawn, flower bed or vegetable garden moist, but no one would stand and hold a hose long enough over a large area to deliver enough water to penetrate several feet deep. The most practical way is to use a sprinkler attached to the end of a hose and placed to best advantage where it can be left until the area receives enough water. Explain to your nurseryman the areas you want to water and he can advise you on the sprinkler that will best do the job. Slopes are the biggest problem, especially before they become completely covered by growth of the ground cover you have planted. Rainbirds are the most practical for large slopes and the sprinkler that delivers a fine misty spray for the smaller slopes.

The water wand is one of the most practical and useful watering tools you

can use in your garden. It enables you to turn on your water full force and deliver it gently in a basin, planter box or over the surface of a flower bed where sprinkling would break down the plants. No garden should be without one.

The automatic system has become popular, especially in gardens where a limited amount of time can be spent in routine garden care. It can be costly to install because it requires a separate valve for lawns, ground covers, shrubs and trees. All of these require a different amount of water and at varying number of days between. Rightly installed and maintained an automatic system will pay for itself within two years time in the amount of water you save.

It is good to know how to water efficiently and to know something of the quantity of water needed to penetrate the three soil types, but the key to real know-how for the soil in your garden is with an inquisitive spade. Dig down into a basin or any place in the garden to see if the soil is moist down deep. Take some soil in your hand and squeeze it, if it holds together and shows the imprint of your fingers it does not need water. If it crumbles in your hand—water. In a flower bed or vegetable garden use a trowel to dig. Too frequent watering forces all of the air out of the soil and many shallow rooted plants die from drowning because of this. One of the real causes of newly set out bedding plants to die is because they are watered every day after planting. In tearing or cutting them apart some of the roots are lost. The first week they are in they can take up but very little water since they are recovering from the shock of transplanting.

Shallow watering causes shallow rooting and a serious disaster in the garden on the extremely hot days that the garden does not get watered.

Basins are the most practical way to water most shrubs and trees. For a newly set out shrub from a gallon can, make the basin at least 2 ft. across, 2½ ft. would be better and as the shrub develops increase the size of the basin. A newly set out tree from a 5 gallon can should have a basin 3 ft. across. Water goes straight down with very little lateral spread, too small a basin will be the same as growing the tree in a container. The top of the tree will be no larger than its root system. In watering in basins fill them half full as you go and then come back and fill to the top. For practical purposes a basin should be 9 inches to 12 inches deep.

If your soil becomes so compacted that water does not penetrate readily or the water runs off your lawn instead of going in, consult your nurseryman for advice to correct this condition.

Learn the water requirements of the plants you grow in your garden. All plants require more water in their juvenile stage, even those that are listed as drought resistent. The average tree or shrub that has reached maturity probably receives twice as much water as it really needs. And a consequence a shrub that normally grows to 6 ft., may become 16 ft. tall.

The University of California Extension Service has much valuable information available for the asking. Or go to the Farm Advisors Office where you can pick up pamphlets on most any phase of gardening there is.

Gardeners are the most generous people in the world. They will eagerly share their knowledge with you. The number of books on gardening grows and each new book presents this fascinating hobby in clearer terms and the diagrams and illustrations are improving all the time.

We hope that this will help you to increase your dividend on your investment in your garden for truly there is no satisfaction in the world like the thrill you receive from a beautiful flower you have grown.

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Dahlias

by Larry Sisk

San Diego County Dahlia Society

A NICE THING about dahlias is that they provide spectacular color both as cutflowers and as garden accent. And, given moderate care they will continue to reward the grower with a bountiful harvest of blooms right on through October.

Now is the time when the grower realizes the pay for his labor as the dahlias come into bloom and reach their full growth in late August. Whether the blooms are wanted for church, home, or party display, or for arranging in artistic designs in combination with other materials, in addition to color in the yard, the dahlia is versatile.

Popularity as a cutflower is shown by the large number of entries in the annual San Diego show section for small flowers. Last year, for example, 25 exhibitors made 401 entries—881 flowers by actual count—in this section.

Classed as small flowers are those no more than 6 inches in diameter, including the pompons, collarettes, and others easily grown in home flower beds.

The larger dahlias also make good cutflowers, displayed in threes and fives, or for eye-catching effect, one specimen to a vase.

Sadly, some flower lovers shy away from dahlias as cutflowers because of a fear that they must have special treatment similar to poinsettias. That isn't true. Burning the stems of dahlias, or soaking them in hot water is a waste of time. Use of aspirin, sugar, or glycerine in the water has doubtful effect.

The way to get the maximum keeping quality out of dahlias is to carry a pail of water to the plant, cut the flowering cane or canes and after removing the lowest foliage from the canes place in the water. The time to cut is very early morning or, preferably, just at dusk. Leaving the flowers in the pail overnight before arranging them will bring out their best qualities.

Dahlias will keep under normal conditions from three to four or more days, the smaller the longer, with or without additives or special treatment.

For exhibition, dahlias should be cut with plenty of stem. This usually means taking the entire cane down to the leaf node closest to the stalk. By cutting above the leaf node, the gardener will make it possible for that cane to continue producing. Two sprouts will appear, one in each node where the leaf joins the stem. Those sprouts then will grow into canes and produce flowers, and as each successive cutting is made, the plant will continue to grow and develop through the entire season.

In growing for exhibition or to obtain the best specimens, the gardener should remember to control the number of canes per plant: the larger the variety, the fewer the number of canes. But for color and cutting, no control of growth is needed except to shape the plant.

After the first cutting of flowers, the plants should be fertilized so they will have growth incentive and power. A bulb food is good; low nitrogen content is most desirable, and a formula of 4-10-10 or 5-12-12 is best.

Foliar feeding is good, too, if preferred. An excellent liquid fertilizer of 2-10-10 balance is on the market, or fish emulsions result in quick response from dahlia plants.

The feeding should continue every three or four weeks, along with regular watering, to obtain maximum flower production, both for cutflowers and for garden display. Dahlias allowed to bloom themselves out in the garden require help in addition to fertilizing and watering; the fading flowers must be removed, and the excess growth of the larger varieties should be restricted. Staking and tying are necessary aides for good garden growth, especially in windy conditions.

With the dahlias reaching their peak

(continued on page 30)

Cactus and Succulents

by San Diego Cactus & Succulent Society

"Ghost plant" *Graptopetalum paraguense* is a small genera of the crassulaceae family, consisting of seven or eight species, whose homeland extends from Arizona down through Mexico. There is great variation in their forms and they have an off-white powdery covering like a grape, from which they got their name graptopetalum. Paraguayense is rather a misnomer since it means "from Paraguay" but it is not recorded as having been found in the wild. It has also been known in the past as *Graptopetalum Weinbergii, Cotyledon paraguensis, G. Byrnsia, Sedum Weinbergia* and *Echeveria.*

It received its nickname because of its pale-gray, bluish-green colored leaves with a tinge of amethyst which readily melts into the dusk of evening. If left in full sun, it will take on an amber appearance. The stems are stout and fleshy, from 8 to 12 inches long, pendulous and informal in nature. The leaves, 2 to 3 inches long, one-half inch thick and three-fourths of an inch wide near the bluntly pointed tip, are flattish, slightly concave on top and have a keeled underside. They form loose but definite rosettes which spiral left in a circular flat cone.

Flowers are small white five-pointed stars bourne on inflorescence extending from the stem during April to May.

This genera is closely related to Echeveria and Pachyphytum and requires the same culture in rich loamy soil, a 50/50 soil and sand. They will stand a great deal of neglect. The plant is easy to grow from leaves or stem cuttings. It is very suitable for either indoors or outdoors growing and an excellent plant for hanging baskets or rock gardens.

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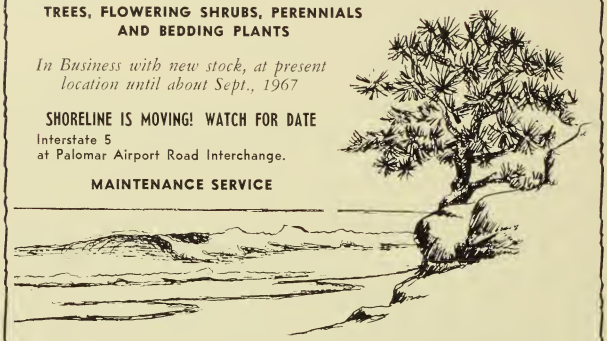

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Fuchsias

by Morrison W. Doty

San Diego Fuchsia Society

DESPITE little warm sunny weather this Spring almost until July, our plants started the season better grown than usual. All growers complained of cold weather causing very little early bloom, yet the San Diego Fuchsia Society was able to put on one of their best shows on June 4th in Balboa Park, and a better one at a downtown bank later in the month. Still more public interest and popularity for our exotic little flower came from the dazzling displays at the huge 5 acre Annual Flower Show of the San Diego County Fair, bringing lots of questions at all times about how to raise and enjoy them. Fortunately few plants are easier to propagate and develop into full-size bushes to delight the amateur gardener than the Fuchsia if a few simple rules are followed. The breath-taking hanging basket that first won you, needs partial shade or protected north or east exposure away from the wind; and constant moisture must be maintained. Even in cool, or damp windy weather they should be finger-tested for moisture underneath, almost every day in the summer since lack of water is the commonest single cause of container plant losses here. Some fogging in the air around the plants on very hot days helps a lot, and deep watering to leech out injurious minerals in water and soil every week or two is important. Watering needs also depend upon your soil mixture. Over-watering in very heavy soil, (especially with poor drainage and cool weather) may cause fuchsia wilt, water mold, and death of the plant.

Soil mixes may vary (thanks to fuchsia's famous adaptability) from 3 or 4 elements in the home-made kind to the nine or more of some commercial mixes with surprisingly similar results. The simple basic mix of noted hybridizer Reiter is: 1/3 rich loam, 1/3 cow manure, 1/6 leaf mold and 1/6 sand. This may seem too simple, inexpensive and out-of-date, now, but it still works fine for fuchsias. Our common soil here usually lacks *humus,* and needs green compost, rich silt from ravines, or a little blood meal to make a rich loam. Fuchsias originated in rain-forest leaf mold humus, and grow best where the nights are cool, with day temperatures in the seventies or eighties. Since September and October often brings our hottest weather here, and so many plant losses result then, they need more care at this time. Water container plants every day, and fog the air if possible when temperatures get above eighties; make more shade; moving baskets to cooler spots, away from warm winds, and mulch plants in the ground to keep roots cool and moist in excessive heat. Watering in the cool of evening or early morning help the plants stand up to the hottest hours better.

Well nourished plants can cope better with heat, and possible pest infestation, common in late summer, so don't forget to feed regularly with a good fish concentrate, (or other safe liquid fertilizer) ten days or two weeks apart. Sharp water spraying of the underside of foliage helps to dislodge many insect pests, and a mild preventive pest spray 2-3 weeks apart avoids infestation. Or you may wish to try the new systemic pest deterrent to be used in the soil. Our many Fuchsia nurseries are glad to assist with dependable suggestions. The safe slow-acting low nitrogen - high - phosphate coarse grained soil fertilizers seem gaining in favor with many growers. Also the rather complex and expensive commercial soil amendment mixtures that are based on scientific principles.

This is the time to live in your garden. Have restful seats placed for pretty views, luring all to linger and enjoy your hobby. Ferns, large and small, well placed, are a great complement to show off Fuchsias, and insure the need for proper shade that some growers tend to forget. Don't overlook the charming use of Fuchsias in flower arrangements and corsages. Try floating the big blooms of San Mateo, Bonanza, Diplomat, Mandarin, Embarcadero, or other striking varieties in glass bowls or perhaps a brandy sniffer. Browse the nurseries for the new varieties, also the new miniatures.

Remember that cuttings exchanged with friends will start fine any time.

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Camellias

by Samuel E. Foster
President San Diego Camellia Society

SUMMER care of your camellias is most important since the care you give your camellias now will pay large dividends to you at blooming time. Here are a few general hints for you to follow during the hot months ahead.

Watering. In average well drained soils, one thorough soaking a week is usually sufficient. If you can incorporate mulch or organic matter into your soil, this will lessen the amount of water you use to keep them moist at all times. Days of heat, low humidity and bright sunshine or wind, will cause camellias to lose water more rapidly than on days of normal weather here in San Diego.

Tender new growth often wilts during the heat of the day, but do not worry about that. These will straighten up by morning, and will stop wilting altogether when they harden up, usually in about four weeks. This wilting will occur whether or not the plant needs water. More camellias die from excessive water than from any other cause.

Insect Pests. Watch for insect pests. You need to learn to recognize them, before they can be efficiently controlled. The most prominent scale pests are the camellia and tea scales which are found on the under side of the leaves. They are tiny things, looking like miniature brown and white oyster shells. Their action causes yellow blotches to appear on the leaf surface.

Spider mites can do much damage also before you realize that they are there. These insects cause the leaves to assume a rust-like appearance, from which they never recover, even though the insects are sprayed and killed. It is difficult to see red spider with the naked eye, but they are visible with a magnifying glass, appearing as tiny brown specks moving about. Another good method of detection is to rub the leaf in question with your fingers; —if mites are present, brown streaks will stain your fingers.

Cygon, used according to the manufacturer's directions, will give good control for almost all camellia pests. Avoid spraying when temperatures are high, otherwise some of the foliage may burn. Make certain that the spray reaches every part of the bush, or you will have the pest colony build back up in a short time by the ones that you missed.

Mulching. As the weather becomes hotter and dryer, a mulch will be of great benefit. One-half to one inch layer of fir-bark is most effective. This slows loss of moisture from the earth around the roots. Avoid getting your mulch too deep, as the tiny feeder roots of the camellia cannot stand to be covered deeply.

Pruning. The most neglected phase of camellia care is pruning. Those who really know camellia culture have no fear of pruning drastically to remove weak wood. Remove droopy twigs from the shaded interior of the bush as well as those that are already dead from being too shaded. A properly pruned plant is one quite hollow in the center and thick on the periphery. Branches within a foot of the ground would be removed from the larger plants. Proper pruning will assure more vigorous plants as well as more freedom from insects. Pruning will be of great value to plants which are not growing properly due to loss of roots in the root system from any cause. A partial root system will support only a partial top growth;—get them in balance again by using your shears vigorously.

Disbudding. Later in the summer, flower buds will form. Your camellia flowers will be finer if only one flower bud is left on each stem. The sooner you remove the excess buds, the better. Make certain that you do not remove the terminal leaf bud, thinking it a flower bud. This is long and pointed while the flower buds are more rounded.

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Orchids

by Byron H. Geer

San Diego County Orchid Society

SUMMER is here once again. It's the most satisfactory time of year for the Orchid grower, and, at the same time the most trying. We can walk through the greenhouse or the Cymbidium yard and literally watch the plants grow. They are making growths and roots as if they realized quite well that the sun is on its downward swing and each day brings a fraction less light and heat. Now, while they are in their most active growth, is the time for generous quantities of Tender Loving Care. Now, while they can use it to best advantage, is when they need feed, water, air and room. In general, we are looking for growth rather than flower production, and a balanced high nitrogen fertilizer is indicated. Somewhat heavier feeding would seem to be in order, too, and a moderate feeding each two weeks or a fertilizing at one quarter strength each week would not be out of line. Orchids can be overfed and serious foliage or root damage will result if this is done. Check the roots on a plant or two after you have stepped up your feeding schedule. If they are light in color and the tips are a healthy emerald green, you are on the right track. Dull gray roots, or root tips that are brown and dry are a danger sign and call out a change in cultural practices. All of the Orchids will demand ample light while they are pushing out growths, but watch out for sunburn. A leaf or growth once sunburned will never recover and contributes little or nothing further to the plant. If damage is extensive it is advisable to remove the injured part since necrotic tissue is a favorite starting place for bacterial and fungal rot. Fortunately, sunburn usually takes several days to develop, and can frequently be caught before the consequences become a disaster. Leaves that are significantly lighter in color at their tips or midsection show that the plant is getting more light than it should have. Move the plant if necessary, or better yet, provide additional shade for the entire area.

Dehydration is another problem with the greenhouse in summer, and results from insufficient atmospheric humidity or loss of roots. The natural tendency, when we see a plant with bulbs wrinkled and soft, is to pour water to it in an attempt to plump it up. Vain attempt. Such wrinkling is ordinarily caused by loss of roots from one cause or another. All the water in the world will do the plant no good if there are no roots to absorb it. As a matter of fact, the most common cause of root loss is drowning with a superabundance of water. Any plant that is shrivelled would be watered very sparingly until a new root collar develops. When there is evidence of new root activity, gradually increase the amount of water given.

Repotting of the Cattleyas may be done at any time if necessary, but best results will be apparent if they are potted just as new growth and roots are starting. Plants disturbed by repotting when they are not in an active growth cycle are extremely apt to sit and sulk for several months. They are not ready to put out new roots; much of the old root system has been lost or damaged in repotting and they seem to resent being forced into doing something they don't want to do. This is transplant shock with a vengeance and though the plant will eventually recover it may require a long convalescent period with very careful watering and feeding.

Cymbidiums should not be repotted this late, unless it is a question of sacrificing possible bloom to save the plant. If Cymbidiums are losing leaves and going to back bulbs, check the condition of the compost. You may find it badly broken down or nonexistent. In such a case, the health of the plant clearly demands that it be divided and repotted into new compost. A Cymbidium crowding the edge of its container should have been repotted five months ago, and in many cases a year and five months ago. But repotting at this late date will almost certainly negate next year's bloom. If this is Tender Loving Care, I'll take vanilla. Reason there sometimes may be for neglecting plants, but I much prefer people who frankly admit their neglect and intend to mend their ways. The woman who gushes at length over her BEAUTIFUL ORCHID and then brings me a plant for repotting that is starved, dehydrated and ill-housed gets rather short shrift from me. I can't help wondering whether her husband and children enjoy the same maternal care. But I digress, and this article is intended for instruction not sermon.

The one thing else that all of the Orchids need during their growing period is adequate room, and for the Cattleyas, staking and tying up of the new growths. Tying can be done while the growths are soft and pliable if done with care. This will bring flowers well up above the crown of the plant and display them in a pleasing manner. If not tied, growths are apt to shoot off at the side and the flowers will be crowded down into the center of neighboring plants. There they cannot open out as they should and will be distorted and twisted out of shape. New leads, both on the Cattleyas and the Cymbidiums will naturally seek light. If they have to go off at an odd angle to get it, this is exactly what they will do. Room between plants is important therefore to allow developing bulbs to grow reasonably straight up.

The necessary chores taken care of, you can go fishing, beaching, cruising or what you will with a perfectly clear conscience.

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Roses

by J. Wells Hershey and
Mary Jane Hershey
San Diego Rose Society

WHAT TO DO in your rose garden in August and September? Water, water and more water was the answer given by rosarians Jean Kenneally and Grace Kirk during luncheon at the San Diego County Fair. We were relaxing over tacos, tamales and tostados, following a morning of rose judging. It was the general consensus of opinion that: watering, with the proper mulching of the rose garden; weekly spraying program (or bi-weekly if that is your schedule) for mildew, and for summer pests if you are not using systemics; fertilizing according to your schedule; and enjoying your rose garden was the agenda to follow. Of course, the last item, enjoy your garden is the best, as this is the whole purpose of gardening.

The gorgeous bloom of roses tends to attract pests that cannot be eliminated by standard garden procedure. The late James A. Gallagher's book, "How to Grow Better Roses" listed some of these and they bear reviewing:

"Pest one: The man from down the street, who grows two Radiance rose bushes and a couple of others that his aunt gave him for his birthday ten years ago. This expert will stroll into your garden and tell you to cut off all the base shoots because they are suckers and will kill the rose bush in a short time. If you are big enough, throw the sucker over the fence, but be sure it isn't the one with the thorns."

Base shoots, basal breaks or canes grow from the bud union and above the bud union! Suckers grow or come from the understock BELOW the bud union! The base shoots or basal breaks are the new canes of tomorrow. They supply the new wood, and the life of the bush and the quality of the bloom is dependent on this new wood. Do not cut off any new growth that is above the bud union as these are the basal breaks or base shoots. The suckers MUST be removed. If the sucker is growing below the soil, remove by digging carefully into the soil below it, pulling it off, with a pair of pliers, from the root. Try to get all of it, leaving no dormant eyes, cutting off if necessary.

"Pest Two: That dear little aunt of yours, who wants some blooms but hates to ask for them. She will suggest that all the buds be cut, for it is good for the rose bushes. Auntie will get her rose buds, and the rose bushes will get the treatment that is good for them. Don't be fooled the next time by the sweet old lady. The bloom that is allowed to mature and is not cut off until the petals fall, will grow on its stem a better flower the next time it blooms—better than the stem that was cut when the bloom was in the bud stage. The stem on the latter will not be mature and will shrink after being cut, and will not produce as good a bloom as if it were permitted to grow naturally. The diameter will be smaller and the greater the diameter of the stem, the stronger the next bloom is going to be."

Quite a few rose growers never cut rose blooms, in the bud stage, during the first year the bush is in their garden, as they know that the extra leaves left on the bush will produce more food for the plant. Knowing the rose and its growth habits are important. Some varieties are such vigorous growers that roses in bud stage can be picked the first year. We enjoy color in our garden, so it is only natural that we leave many blooms on the bush until petals fall. However, this does not mean that we do not cut blooms in bud or half open stage, but we do consider the plant and its condition before cutting. If visitors hint that it is good to cut off all flowers to encourage the bush to produce more, we assure them that we do—after the petals have fallen.

"Pest Three: The loving husband who believes that cultivating and digging is heavy work and is much too strenuous for his dear wife. So one day when the little woman is visiting a friend, he decides now would be a good time to do some of this heavy work and surprise her when she comes home. Getting a spading fork from the garage, he selects the rose garden as his theater of operations and goes to work with a will, turning all the weeds

(continued on page 30)

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National Rose Survey Results

By American Rose Society

The final scores from the National Rose Survey conducted last summer are now tabulated and new ratings will soon be assigned to all the older roses. This survey included only those varieties available in America more than five years. The newer varieties are evaluated annually in the Proof of the Pudding surveys, and incorporated into the *Guide for Buying Roses*. All roses receive a permanent national rating after five years in the Proof of the Pudding program.

Charts show the new ratings for the current top twenty roses compared with the former top twenty as they were prior to the survey. These show the continued high standing of many all-time favorite roses, and the displacement of some old favorites by newer and more popular varieties.

In the forty years that these surveys have been conducted, no rose has ever attained a perfect rating of 10. The highest rated rose is **'Peace,'** which received in 1953 a permanent rating of 9.6. This favorite of all roses has withstood the time test. The new survey shows this lovely hybrid tea still at the top of the list, dropping only two-tenths of a point to 9.4. In addition to its excellent rating, **'Peace'** received the largest number of reports, indicating that it is still the most widely grown rose in America.

'Queen Elizabeth,' a beautiful clear pink grandiflora, which has for more than a decade enjoyed popularity in American gardens, rose from number five to the number two position, replacing **'Crimson Glory.'** This old-timer, a red hybrid tea introduced in 1935, moved far down but still remains in the top twenty. **'Chrysler Imperial,'** a later crimson-red hybrid tea with a pleasing fragrance, is now the fourth highest rated rose. **'Tiffany,'** a ten-year-old hybrid tea, moved from number nine to the number three position. The dark red grandiflora **'Carrousel'** moved down from third to number nine on the list. Other activity among the grandifloras saw the orange-red **'Montezuma'** move five places up the list to the number six position.

The floribunda **'Fashion'** that had been seventh in popularity, still remains in the top 20, but now at the fifteenth position. Another floribunda, **'Little Darling,'** an abundant blooming pink-yellow blend, moved up from number thirteen to fifth on the list.

Queen Elizabeth, a beautiful clear pink grandiflora is a very free bloomer.

All new ratings will be incorporated into the **1968 Guide for Buying Roses,** scheduled for early fall publication.

TOP 20 ROSES

(available more than 5 years)
as determined by National Survey

	Rating
Peace	9.4
Queen Elizabeth	9.3
Tiffany	9.1
Chrysler Imperial	8.9
Little Darling	8.6
Montezuma	8.6
Betty Prior	8.5
Charlotte Armstrong	8.5
Carrousel	8.4
Confidence	8.4
Crimson Glory	8.3
Dainty Bess	8.3
Helen Traubel	8.3
Circus	8.0
Fashion	8.0
Blaze	7.9
Sutter's Gold	7.8
Burnaby	7.6
Frau Karl Druschki	7.6
Mojave	7.6

TOP 20 ROSES

(available more than 5 years)
prior to new National Survey

	Rating
Peace	9.6
Crimson Glory	9.1
Carrousel	9.0
Charlotte Armstrong	9.0
Queen Elizabeth	9.0
Betty Prior	9.0
Fashion	9.0
Chrysler Imperial	8.8
Tiffany	8.8
Helen Traubel	8.7
Montezuma	8.6
Dainty Bess	8.4
Little Darling	8.4
Confidence	8.3
Burnaby	8.1
Blaze	8.1
Eclipse	8.1
Sutter's Gold	8.1
Frau Karl Druschki	8.1
Picture	8.0

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ARAGRO
FISH EMULSION

Irises

by Bill Gunther
San Diego-Imperial Counties Iris Society

THE IRIS SECTION of the flower show of the 1967 County Fair at Del Mar served to exemplify the latest trends in iris growing and exhibiting in this area. In comparison with prior iris shows held in Balboa Park, San Diego, the Del Mar show reflected at least three significant new developments, as follows:

1. Some types of irises which never before have been seen in an iris show in San Diego County were included in the show schedule and were included in the display.

2. For the first time in any iris show in this area, a larger total of blue ribbon awards went to beardless irises than to bearded irises.

3. For the first time in any accredited iris show in this county it was acceptable practise to use unstandardized containers, extraneous foliage, and special accessories in specimen bloom competition. In other words, iris arrangements received horticultural awards.

Comment on these developments follows:

The 1967 San Diego County Fair was held during the twelve day period ending July 4. Although that period is considered to be "off season" for iris bloom in this area, there actually were more varied types of irises on exhibit than in most of San Diego's prior spring and fall shows. Entries included not only a full spectrum of bearded types (talls, medians, dwarfs, and arilbreds) but also beardless irises of the Japanese, English, Pacific Coast, Siberian, and spuria categories, and also the iris species *ensata, pseudacorus, kaempferi, douglasiana,* and *xiphioides.* None of these irises was forced into off-season bloom by artificially controlled greenhouse conditions; they all were grown outdoors in this area. The explanation for appearance of those types which have not previously appeared in local shows is that local hobbyists are becoming increasingly interested in the unusual types; they are obtaining and cultivating irises which never before have been grown in this area. The reason why many springtime irises were in bloom for this summertime show is that some irises, like some other plants, become confused by the very mild climate of the coastal portion of San Diego County. The seasonal temperature variation along our seacoast is so slight that some of our irises seem to lose track of the seasons; they consequently bloom in haphazard fashion the year round, instead of just at the proper and traditional springtime season when irises in other places bloom.

The 1967 County Fair iris show was the first iris show in this area in which beardless irises won a majority of the awards. An apologist's explanation is that the show schedule encouraged entry of beardless irises by setting up special sections or classes for them. A more valid explanation is that local entries were available to fill the newly scheduled classes this year, but never before, because more local hobbyists than ever before are now growing beardless irises. The trend is apparent when it is considered that only three or four years ago tall bearded irises comprised about 90% of the entries of each local iris show; at the 1967 County Fair show tall bearded irises comprised less than a third of the iris entries. Up to and including the year 1966 no beardless irises of the Japanese and/or English types had been entered in any accredited iris show in San Diego County; at the 1967 County Fair show both types were exhibited every day. And at that show the Japanese iris **Gay Gallant** won honors as the best bloom of the

day—against competition which included the best orchid, the best glad, the best carnation, and the best tall bearded iris.

Use of non-standardized containers for specimen irises in the horticultural classes more and more is becoming a matter of necessity rather than just a matter of aesthetic preference. This necessity derives from the increasing diversity of types of irises in horticultural competition. In the days when only tall bearded irises were available for specimen competition it was very possible, for instance, to use disguised quart-sized milk bottles as standard containers for all specimens in competition. But milk bottles are hopelessly unsuitable for the reticulata irises which are only a couple inches high and which require a bowl-shaped container and a small pin holder for display purposes. And neither is a milk bottle suitable for the species iris *pseudacorus* which grows up to six feet tall and which for exhibition purposes might require a weighted crockery container with heavy wire mesh for vertical support. In both cases good staging would necessitate leafy foliage (not iris foliage) to screen the wire mesh or the pinholder. In both cases the combination of container, foliage, accessories, and blossoms would constitute an "arrangement," which would be entered in specimen competition. There are no rules in any publication of the American Iris Society which require standardization of containers for irises in specimen competition, or which prohibit use of other plant foliage or accessories appropriate for effective display of specimen stalks in horticultural competition. The County Fair iris show vividly demonstrated that group of iris specimens staged in arrangement fashion makes a far more attractive display than do rows of naked specimen stalks placed in rows of standardized containers. It might be suggested that any show committee which provides standardized containers for display of specimen blooms is degrading rather than enhancing the beauty of its show. It further might be anticipated that at some future date there no longer will be a separation of the artistic and horticultural sections of a flower show; the two will be merged as interdependent activities. And eventually, after the present merging of iris garden judges and iris show judges is completed, there also may follow a merging of the functions of the artistic and the horticultural judges. We are looking forward to that day.

DAHLIAS

from page 22

blooming period, they also are targets for hordes of summer insects and ailments, as are most other flowers and plants in our semi-tropical climate.

At this time of year, aphids, white flies, leaf hoppers and red spiders are worries for all gardeners. The way to beat them is to prevent them. This is done by a regular routine of spraying with malathion each week.

Leaf chewers, grasshoppers and worms of various kinds also like dahlias as well as other plants, but they can be prevented, as well. The malathion, applied regularly, gets most of them, but some gardeners apply a *coup de grace* by adding chlordane or arsenate of lead to the spraying mixture, to finish them off.

If red spiders get a start—in roses, chrysanthemums or dahlias—when hot weather sets in, spraying with kelthane is recommended, in addition to or mixed with the malathion.

Many dahlia growers are experimenting with the new systematic insecticides this year, but thus far are withholding judgment. Early in the growing season the granular systemics failed to control thrip, probably because the small dahlia sprouts took their sustenance from the mother tuber instead of from feeder roots that would have picked up the deadly systemic poisons.

The even-newer liquid systemics may be better because of direct contact with the tiny sprouts as well as the insects.

Mildew, a problem for dahlias, especially along the coast during the late part of the growing season, also can be prevented by precautionary spraying. There are several fungicides, including captan, that mix well with insecticides and which may be used just ahead of the mildew season—in early September for some. Once the mildew gets a start, nothing is better than dusting with sulphur.

In spite of the work, the watering, feeding and spraying, that splash of color, or that perfect dahlia bloom in a tall vase is reward indeed for the devotee.

WHEN YOU MOVE

Send new and old address
plus zip code to
CALIFORNIA GARDEN
Balboa Park, San Diego 1, Calif. 92101

LEAD A SHELTERED LIFE

from page 9

Speaking of colors, even the rainbow takes a back seat to the wide range of tones available this year. You can choose delicate pastels or bright, bold shades that fairly shout out your taste. Florals, stripes, plaids, and checks may also suit your springtime fancy.

With all its new-found splendor, cotton canvas still retains its age-old, dependable qualities. And, through modern chemistry and technology, it now lasts longer, is more water-repellent, and more sun — and mildew — resistant.

ROSES

from page 27

under six inches deep. Those long narrow things he ignores or breaks off, as they are just something that interferes with the work of turning the weeds. Cultivating and digging in the rose bed will cut and break many roots that are invisible. It may take the rose bushes three months longer to recuperate from one deep cultivation. Don't cultivate, and grow better roses."

You can bet that dear wife's reaction was a bigger surprise to the husband!! If you have a good mulch on the rose bed,—that can be raked lightly, but NEVER disturb the earth.

Summer is the time to visit rose gardens and observe the growing habits of roses you do not have or know, and with this in mind, the San Diego Rose Society's Summer Program includes:

Sunday, August 27, 1:00 PM—Visit Quail Park Botanical Garden until 2:30 PM the departure time for group to proceed to the rose garden of members Alice and Clarence Boyd, 1485 Summit Ave., Encinitas.

Sunday, September 24, 2:30 PM—Meet in the lovely rose garden of Loraine and Robert Schmidt, 1683 Catalina Blvd. At 3:00 PM—Proceed to rose garden of Nina and Al O'Bleness, 4636 Niagara St., and at 3:45 PM, Conclude tour by visiting rose garden of Jean Kenneally, 2260 Catalina Blvd.

As always, those interested in rose growing and rose gardens are welcome to attend the activities of the San Diego Rose Society and to join the group.

SAN DIEGO FLORAL ASSOCIATION

FLORAL BUILDING, BALBOA PARK

(Under the sponsorship of
The Park and Recreation Dept., City of San Diego)

Third Tuesday, Floral Building, 8 p.m.
Pres.: Mr. Virgil H. Schade 298-1949
1633 Pennsylvania

FLOWER ARRANGERS' GUILD OF SAN DIEGO
First Thursday, Floral Building, 7:30 p.m.
Pres.: Mrs. Harry B. Cutler 466-7579
4671 Toni Lane, S.D. 92115

COORDINATING GROUPS

FLORAL COMMITTEE, 200th ANNIVERSARY, Inc.
Bi-monthly, 3rd Thursday, Floral Building, 7:30 p.m.
Joan Betts, Chairman, Alice Zukor, Co-chairman 291-1969
1600 Pacific Hwy, Rm. 801, S.D., Cal. 92101

SAN DIEGO BOTANICAL GARDEN FOUNDATION, Inc.
Second Thursday, Floral Building
P.O. Box 12162, S. D., Calif. 92112
Pres.: Virgil Schade 298-1949
1633 Pennsylvania

AFFILIATE MEMBERS 1967

COUNTY CIVIC GARDEN CLUB
Meets every Thursday, 12m to 1 p.m.
Garden House, Grape and 101 Civic Center
Pres.: Mrs. Donald A. Innis 298-1690
1827 Puterbaugh, S.D. 92103
Rep.: James Saraceno 274-2628
3366 Lloyd St., S.D. 92117

GENERAL DYNAMICS GARDEN CLUB
First Wednesday, Floral Building, 7:30 p.m.
Pres.: William D. Spann 278-2410
4101 Mt. Bigelow Wy., S.D. 92111
Rep. Dir.: J. E. Henderson 274-1754
3503 Yosemite, S.D. 92109

MEN'S GARDEN CLUB OF SAN DIEGO CO.
Fourth Monday, Floral Bldg., 7:30 p.m.
Pres.: Jim D. Campbell 278-4372
2903 Grayling Dr. S.D. 92113
Rep.: Dr. J. W. Troxell 282-9131
4950 Canterbury Drive, S.D. 92116

ORGANIC GARDENING CLUB
Third Friday, Floral Building, 7:30 p.m.
Pres.: C. Frank Carpenter 583-1064
5281 Remington Rd., S.D. 92115
Rep.: Mrs. Mary Panek 222-5031
4680 Del Monte Ave., S.D. 92107

POINT LOMA GARDEN CLUB
First Friday, Floral Bldg., 10 a.m.
Pres.: Mrs. Harold A. Skinner 222-1211
3530 Lowell, S.D. 92106
Rep.: Mrs. Lorraine Warner 222-9133
3044 N. Evergreen, S.D. 92110

SAN DIEGO BONSAI SOCIETY, INC.
Second Sunday, Floral Bldg., 1-5 p.m.
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6655 Detroit St., San Diego
Rep.: Mrs. Helen G. Howe
4767½ Lantana Dr., S.D. 92105 281-1158

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Pres.: Reuben V. Vaughan 223-7629
1041 Le Roy St., S.D. 92106
Rep.: Frank Mousseau
5955 Lauretta, S.D. 92110 295-9596

SAN DIEGO CAMELLIA SOCIETY
Second Friday, Floral Building, 7:30 p.m.
Pres.: Samuel E. Foster 444-5314
202 Carter, El Cajon 92020
Rep.: Mrs. Lester Crowder 295-5871
3130 Second St., S.D. 92103

S.D. CHAPTER CALIF. ASS'N NURSERYMEN
Second and Fourth Thursday, 7:30 p.m.
Pres.: John Basney 273-4636
4731 Conrad Ave., S.D. 92117
Rep.: John Basney 273-4636
4731 Conrad Ave., S.D. 92117

SAN DIEGO COUNTY DAHLIA SOCIETY
Fourth Tuesday, Floral Building, 7:30 p.m.
Pres.: Gerald L. Lohmann 295-7645
4564½ Arizona St., S.D. 92116
Rep.: Mrs. R. M. Middleton 296-3246
3944 Centre St., S.D. 92103

SD-IMPERIAL COUNTIES IRIS SOCIETY
Meets 3rd Sunday, Floral Bldg., 2:30 p.m.
Pres.: Arthur B. Day 422-5172
279 J St. Chula Vista 92010
Rep.: Arthur B. Day

SAN DIEGO COUNTY ORCHID SOCIETY
First Tuesday, Floral Building, 8 p.m.
Pres.: Robert Coats 469-6227
7340 Santa Maria Dr., La Mesa
Rep.: Byron Geer 279-1191
5094 Mt. La Platta Dr., S.D. 92117

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Pres.: William C. Knotts 277-1188
1912 David St., S.D. 92111
Rep.: Mrs. William Knotts
1912 David St., S.D. 92111 277-1188

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Third Monday, Floral Building, 8 p.m.
Pres.: Harry B. Cutler 466-7579
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Rep.: Mrs. Felix White 264-4440
5282 Imperial Ave., S.D. 92114

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First Wednesday, Floral Building, 10:30 a.m.
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Rep.: Mrs. Roland S. Hoyt 296-2757
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OTHER GARDEN CLUBS

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Third Friday, Homes of Members, 10 a.m.
Pres.: Miss Myrle Patterson 224-1572
4310 Piedmont Dr., S.D. 92107

BERNARDO BEAUTIFUL & GARDEN CLUB
First Wednesday, 1:30 Seven Oaks Community Center, Bernardo Oaks Dr., Rancho Bernardo
Pres.: Fred W. Walters 748-1486
12048 Callado Dr., S.D. 92128

CARLSBAD GARDEN CLUB
First Friday, VFW Hall, Carlsbad, 1:30 p.m.
Pres.: Mrs. Daniel N. Kurily 729-6618
1430 Forest Ave., Carlsbad 92108

CHULA VISTA FUCHSIA SOCIETY
Second Tuesday, Norman Park Recreation Center, 7:30 p.m.
Pres.: Mr. August H. Goerke 420-3930
481 Flower, Chula Vista 92110

CHULA VISTA GARDEN CLUB
Meets 3rd Wednesday 1:00 p.m.
C.V. Woman's Club Bldg., 357 G St., C.V.
Pres.: Mrs. Benjamin Tate 420-1700
99 Second St., Chula Vista 92010

CITY BEAUTIFUL OF SAN DIEGO
Pres.: Mrs. Raymond E. Smith 488-0830
4995 Fanuel St., Pacific Beach 92109

CLAIREMONT GARDEN CLUB
Meets Third Tuesday, 9:30 a.m.
Pres.: Mrs. Stanley Fletcher 276-2520
3090 Chicago St., S.D. 92117

CORONADO FLORAL ASSOCIATION
Meets 1st Tuesday, Red Cross Bldg., 1113 Adella Lane
Pres.: Capt. Richard W. Parker, U.S.N. Retired 435-6454
508 Glorietta Blvd., Coronado 92118

CROSS-TOWN GARDEN CLUB
Third Tuesday, Knights of Columbus Hall, 3827 43rd St., S.D. 92105, 8 p.m.
Pres.: Charles Williams 284-2317
4240 46th, S.D. 92115

CROWN GARDEN CLUB OF CORONADO
Fourth Thursday, Red Cross Bldg, 1113 Adella Lane, 9:30 a.m.
Pres.: Mrs. Robert H. Keehn 435-8268
1111 Coronado, Coronado 92118

DELCADIA GARDEN CLUB
First Wednesday, Encinitas Union Elementary School, 7:30 p.m.
Pres.: Mrs. I. F. Nichols 753-5409
159 Diana, Leucadia 92046

DOS VALLES GARDEN CLUB (PAUMA VLY.)
Meets 2nd Tuesday, Pauma Valley Center 1:30
Pres.: Mrs. R. B. Davidson 745-9445
R. 1, Box 361, Valley Center 92061

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3rd Friday, Veterans Memorial Hall 1:00 p.m.
Pres.: Mrs. Lawrence Mineah 745-9629
201 S. Upas, Escondido

FALLBROOK GARDEN CLUB
Last Thursday, Fallbrook Woman's Clubhouse, 1:30 p.m.
Pres.: Mrs. Roman E. Shore 728-7044
1211 Pepper Tree Lane, Fallbrook 92028

GROSSMONT GARDEN CLUB
Second Monday, La Mesa Chamber of Commerce Bldg., University Ave., La Mesa 92041
Pres.: Mrs. James Culver 466-6388
8558 Boulder Dr., La Mesa 92041

IMPERIAL BEACH GARDEN CLUB
3rd Tuesday, Imperial Beach Civic Center, 1:30 p.m.
Pres.: Mrs. Chris Roberts 424-6936
553 Spruce St., Imperial Beach 92032

LAKESIDE GARDEN CLUB
2nd Monday, Lakeside Farm School, 7:30 p.m.
Pres.: Mrs. Loy M. Smith 443-3089
9511 Farmington Dr., Lakeside 92040

LA MESA GARDEN CLUB
(Garden Sec. Womans' Club)
3rd Thursday, La Mesa Women's Club, 1:00 p.m.
Pres.: Mrs. Allen W. Carpenter 583-7508
5169 Ewing, S.D.

LAS JARDINERAS
Third Monday, 10 a.m. Homes of members
Pres.: Mrs. James I. Robinson 223-0125
3443 Whittier St., S.D. 92106

LEMON GROVE WOMAN'S CLUB
(Garden Section)
First Tuesday, Lemon Grove Woman's Club House, 1 p.m.
Pres.: Mrs. Hal Crow 466-3330
3850 Quarry Rd., La Mesa

MISSION GARDEN CLUB
Meets First Monday, 8 p.m.
Barbour Hall, Pershing and University
Pres.: Dr. R. J. McBride 465-1311
4635 Panorama Drive, La Mesa
Rep.: Julia Bohe 282-7422
3145 No. Mt. View Dr., S.D. 92116

NATIONAL CITY GARDEN CLUB
Third Wednesday, National City Community Bldg., 7:30 p.m.
Pres.: Arliss A. Agnew 477-8416
420 Twelfth St., National City 92050

NORTH COUNTY ROSE SOCIETY
Meets First Tuesday, 7:30 p.m. at Palomar College
Pres.: James A. Kirk 748-3870
15131 Espola Road, Poway

NORTH COUNTY SHADE PLANT CLUB
Second Sat., 1:00 p.m. Seacoast Hall, Encinitas
Pres.: E. Grove Teaney 726-3728
114 Natal Wy., Vista

O. C. IT GROW GARDEN CLUB
Second Wednesday, S. Oceanside School Auditorium, 7:30 p.m.
Pres.: Mr. Earl H. McPherson 729-1785
3476 Pio Pico Dr., Carslbad, Calif. 92008

PACIFIC BEACH GARDEN CLUB
Meet second Monday, 7:30 p.m. Community Club House, Gresham and Diamond Sts., Pacific Beach
Pres.: Mrs. Charles E. Domler 283-3642
5158 Hastings Rd., S.D. 92116

PALOMAR CACTUS & SUCCULENT SOCIETY
Third Saturday, 1 p.m., Palomar College Foreign Language Building, Room F22
Pres. Mrs. Katie McReynolds 755-4047
P.O. Box 111, Del Mar 92014

PALOMAR ORCHID SOCIETY
Meets Third Wednesday, 7:30 p.m., Avocado Inn, 114 Hillside Terrace, Vista
Pres.: Eugene A. Casey 753-3571
932 Crest Drive, Encinitas

POWAY VALLEY GARDEN CLUB
2nd Wednesday, 9:30 a.m., Community Church
Pres.: Mrs. Ervin Pringle 748-1894
13517 Poway Rd. #H Poway 92064

RANCHO SANTE FE GARDEN CLUB
Second Tuesday—Club House, 2:00 p.m.
Pres.: Mrs. Edmund T. Price 756-2204
Box 576, Rancho Santa Fe 92067

SAN CARLOS GARDEN CLUB
Fourth Tuesday, San Carlos Club, 6955 Golfcrest Drive
Pres. Mrs. Glenn F. Bliss 463-4349
6275 Cowles Mountain, San Diego 92119

SAN DIEGO BRANCH AMERICAN BEGONIA SOCIETY
Fourth Monday, Barbour Hall - Univ & Pershing, 8 p.m.
Pres.: Mrs. Eugene Cooper 295-7938
4444 Arista Dr., S.D. 92103

SAN DIEGO BROMELIAD SOCIETY
Second Monday, 7:30 p.m. Meets at home of president
Pres.: Mrs. Cleoves Hardin 469-3038
9295 Harness Rd., Spring Valley 92077

SAN DIEGO WOMEN'S CLUB Home & Garden Sec.
Pres.: Mrs. Lawrence A. Larson 232-8231
1468 C St., S.D.

SAN DIEGUITO GARDEN CLUB
Third Wednesday, Seacoast Savings Building, Encinitas, 10 a.m.
Pres.: Mrs. Waldo Vogt 755-4772
773 Barbara Ave., Solana Beach 92075

SAN MIGUEL BRANCH AMERICAN BEGONIA SOCIETY
First Wed., Youth Center, Lemon Grove
Pres.: Ferris Jones 466-0138
4610 68th St., S.D.

SANTA MARIA VALLEY GARDEN CLUB
Second Monday, Ramona Women's Club House, 5th and Main, 9:30 a.m.
Pres.: Mrs. Stanley MacKenzie 789-1135
R. 1, Box 949, Ramona 92065

SANTEE WOMEN'S CLUB Garden Sec.
Pres.: Mrs. Leon Roloff 448-0291
9138 Willow Grove Ave., Santee 92071

SWEETWATER JUNIOR GARDEN CLUB
First Monday, 7:30 p.m. Meets at home of Temporary President
Temp. Pres.: Cleoves Hardin 469-3038
9195 Harness Rd., Spring Valley 92077

VALLE GARDEN CLUB, POWAY
Meets 3rd Thursday, 10 a.m. Homes of members
Pres.: Mrs. Brown Thompson III
16728 Espola Rd., Poway 92064

VISTA GARDEN CLUB
First Friday, Vista Rec. Center 1:00 p.m.
Pres.: Mrs. Daniel Ilich 724-8020
551 Morningside Pl., Vista 92083

VISTA MESA GARDEN CLUB
Second Tuesday, 2 p.m. Family Association Center
Pres.: Mrs. Clara Haskins 465-0910
2352 El Prado, Lemon Grove 92045

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